Class B

File No PWD 23 MKR 69

MYSORE GOVERNMENT SECRETARIAT

Notes Correspondence/Collection

Department PWD Section Major Irrigation

Subject :— Kabini Project - Joint Surveys of Submergible area in Kerala State.

Earlier References :— PWD 21 MKR 61

Late References :— PWD 12 MKR 73.

Irrig

11-6-69
28-7-72

(Classification A/B/C)

Notes Pages 44
Correspondence Pages 115
~~Sec~~/Not for section Note Book
To be destroyed after

Under Secretary to Government.

DOCKET SHEET

Department: PWD.

File No. PWD 23. MKR 69

Section Major Irrgn.

Volume: I

SUBJECT

Kabani Project of the Govt of Mysore Regarding Joint Surveys of Submergible area in Kerala State—

Number and date 1	To whom sent 2	Instructions 3
1) 13.3.70	Secy. PWD. CY 16.3	
1439 PWD 13.3.70		26-8-71. Addl. Secy. Secy. PWD. No 3802 Date 29 Secy AS 6.9 Engg. PWD. No 1935 Date 13/9
Irrl. Misc. No. 1452 16/3/70	Secy PWE.	F 1858/DS1/71
1965 18/3		15-9-71. Law Dept.
Secy. PWD. 5771 Date 21.9.71	Secy.	
4799/DS1/70		L.D. (Lit. II) No Date 6435 16/9/71
5061/DS1/71 —	See PWD	
12-70.	Secy PWE.	6-10-71. L.D. Addl. Secy, PWD. No. 2787 L dt 16/12
Irr. PWD. 16629 Irr 26/12		F 4713/DS1/71
		F 2782/DS1/71

L & L SECTION
LAW & P.A. DEPT.
No. 5193
16 Sept 1971
Section 4

[P.T.O.

WD—06111—GPB—2,000 pads of 100 shts. [redacted]

Number and date 1	To whom sent 2	Instructions 3
Secy. PWD. No 2706 Date 15-5	Secy AS 7.6.	
1048	7/6/A	
Secy. PWD. No 3382 Date 26.6.	Secy MS/MI 30.6	
	Minister of State for Major Irrigation No. [illegible] Date 7.7.72	
GM.89/A/72 8-7-72	Secy PWE	
	AS 13.7	
1330	13/7	

PWD 23 MKR.69

G. S. | Subject:- Kabani Project - Govt of Mysore Regarding | File No.

Serial No 1 Receipt

Letter No DWT II - 11 (9)/66 dated 6.6.69 from GOI Min of Irrigation and Power New Delhi

1) Submitted for perusal pl. A Copy of the GOI letter may be sent to CE 1 (S) and called for his Comments if approved. A draft is kept below for approval

3 ef.

11/6.

PWD 2) Please see the letter from the Government of India placed at Sl.No.1 below. They have enclosed a copy of the letter from the Government of Kerala and have requested for comments.

The letter pertains to Kabini Project. The request made by the Kerala is :

i) that the 1924 Agreement should be revised at the earliest and ~~only~~ until this is done, no schemes be allowed to be taken up by Madras and Mysore States in terms of 1924 Agreement without the concurrence of Kerala Government;

ii) that the Government of Mysore should not be allowed to proceed with the ~~Government of~~ work of Kabini Project;

iii) that the Government of Mysore may furnish a copy of the Kabini Project report to Kerala.

WD 01050 - G.B.--8,00,000 13-12-65

P.35

The 1924 Agreement between the Governments of Madras and Mysore provides the following:- [Clause 10-(iv)] A Andhra comments Report Vol II

" The Madras Government shall be at liberty to construct new irrigation works on the tributaries of the Cauvery in Madras and should the Government of Madras construct Bhavani, Amravathi and Noyel rivers in Madras any new storage reservoir, the Mysore Government shall be at liberty to construct as an off set a storage reservoir on one of the tributaries of Cauvery in Mysore of a capacity not exceeding 60% of the new reservoir in Madras."

The Kabini reservoir is planned as an offset against the Bhavani Sagar in Madras State. The Government of Kerala for the first time in July 1961 requested for a copy of the Kabini project for examining the same. Page c Paras 338-343 of the file PWD 21 MKR 61 placed below may please be seen for a brief account the correspondence that has taken place between the Governments of Kerala, Mysore and Madras and the Government of India in this matter. The Government of Kerala have even proposed this subject for discussion in the southern zonal council and the views of Mysore Government on the subject placed by the Government of Kerala for discussion in the Zonal Council may be seen at pages 231-233 of the file PWD 2 MKR 61 placed below. Page c The stand taken so far has been that the Govemment of Kerala cannot question the taking up of the Kabini Project by Mysore in as much as the project is proposed as per the terms of 1924 Agreement and then then Govemment of Madras had not made any claim whatsoever on the waters of Kabini which were flowing in the then Madras State which is now on the reorganisation has been transferred to the present Kerala State. And also that the claim of Kerala, if any, with regard to the waters of Kabini can be discussed only when the 1924 Agreement is reconsidered and reviewed. The present letter of the Government of Kerala have indicated that the 1924 Agreement should be immediately revised. As far as the revision of this Agreement is concerned, a de novo consideration of the entire agreement has been the Mysore stand since the 1924 Agreement has been unjust and harmful to our interest. In addition to seeking the revision of the 1924 Agreement, it is suggested by Kerala that no schemes be allowed to be taken up by Madras and Mysore States in terms of the 1924 Agreement without the concurrence of the Kerala Government till the agreement is revised. As far as Madras State is concerned, perhaps, this may not cause much damage to that State. But in the case of Mysore, we have at present a number of projects in the Cauvery Basin which are under execution and a few more are contemplated to be taken up. If the

request of Kerala is to be acceded, it would mean complete stoppage of all works in Mysore State in the Cauvery Basin. Such a proposal cannot therefore, be accepted. If any discussion perhaps is to be with the Government of Kerala, it will have to be limited to Kabini waters alone since it is only this stream which originates in Kerala and flows into Mysore State.

In this connection the letter from the C.W.P.C. dated 11th July 1968 placed at page 35 of the file PWD 20 MKR 67 may please be seen. The C.W.P.C. had called for a brief note on the Kabini project giving its salient features etc. With the letter mentioned, they have furnished their comments on this note of the Kabini Project and have indicated that the revised project of Kabini will have to be reviewed by the Advisory Committee etc. Further, the Government of India, with their letter dated 18th September 1968 at page 42 of the same file have indicated that in view of the comments of the C.W.P.C. and also the objections raised by the Government of Kerala and Madras on this project, the State Government may consider the matter further and await the clearance of the project and a settlement of the inter-State aspect before proceeding with it. The notes in paras in 81-87 of the same file on this matter may please be seen. The Chief Minister has minuted therein as follows:-

> " The attitude of the Government of India does not seem to be helpful and impartial. We need not take serious note of their objection. The best way is to go ahead with the projects and complete them as early as possible.
>
> V. Patil "

The remarks of the Chief Engineer on the comments made by the C.W. & P.C. have been called for and they are still awaited.

We may perhaps, therefore, reiterate our previous stand and inform the Government of India that the Kabini Project has been taken up under the 1924 Agreement as an offset reservoir against the Bhavani Sagar in Madras and in as much as the Government of Madras had not made any proposals at the time of 1924 agreement with regard to the utilisation of Kabini waters in that State, the concurrence of the Government of Kerala who are the successors to the Government of

WD 01060—GPK—8,00,000 13-12-65

Madras as far as the Kabini is concerned, is not necessary) and any discussion with the Kerala Government will have to be limited with regard to the waters of Kabini after taking into consideration the rights that accrued to the Government of Mysore on this river under the 1924 Agreement.

A

Adv.. No. 2146 D. 16.6.69

DS)
Additional Secy P.WD)

4
13/6

15/6/69

3) I agree with the Suggestion DS(I) above; we may perhaps like to omit the portion underlined A above.

17/6/69

Secy PWD. No 4887

4) I agree with Addl Secy May I see the draft.

D. S. P. No. 2533

18/6

19/6/69

5) A draft addressed to Govt of India is kept below for approval pl

Addl. Secy., P.W. No. [illegible] Date 6

19/6

DS)
Additional Secy P.WD)

4
20/6

20/6.

20/6/69

Secy PWD. No 15326 E

2/7/69

IFTEKHAR AHMED,
Addl. Secy., PW & E Depts

207

G. S.	Subject:	File No.
	Prapaga	

5326/PWS/69.

6) for perusal before issue'

CHANDAPPA PATEL
Secy. P. W. & Elecy. Dept.

C.M. -7-

Chief Min.
No. 3284
Dtd. 5/7/69
C.S. PWD (Irrgn).
No. 261) Date 7/7

V. Patil 6/7
(VEERENDRA PATIL)
Chief Minister.

9/7 Pays

7/7/69

9 S (1)

9 issued 11.7.69 mm 24/9/7

d/FI

-8-

Post Copy of the Telegram No. 593. from Central Water & Power Commission (Water wing) New Delhi. -

4) Submitted for perusal. A Copy of the note on the Kabani project may be sent as desired. A draft addressed to CW & PC. is kept below for approval pl.

11/8.

11/8/69

issued 12.8.69 mm

24/11/69

Subject: Kabini project of the Govt of Mysore. File No. PWD 23 MKR 69 M. G. S.

WD 01050—G9B—8,00,000 13-12-65

Telegram NO 20400A dated 11-8-69 from Directorate TE. CWPC, New Delhi

8) please peruse the Telegram kept below. A Two Copies of the Notes* and Salient features of Kabini Project as revised may be sent to Directorate CWPC as desired. A draft is also kept below for approval pl.

*Flag A

14/8 A note on Kabini has already been sent to Centre on 2-2-68

14/8 Pl see p 64 of PWD 20 MKR 67 Part 2 passed today. Centre have now called for two more copies. Copies can be sent.

14/8

BS) 14/8/69

Issued 21-8-69 21/8/69

M. G. S.

Subject: Kabani Project — Regarding

File No. PWD 23 MKR 69

Letter No 25578/P1/66/WSP dated 16.8.69 from Water & Power Department-General & planning Trivandrum.

10) Submitted for perusal pl. In this connection please perusal paras 334 & 335 in file No PWD. 21 MKR 61 (Part-II) linked and kept below. and also Page 203. vis (Flag 'A').

The Reply to Govt of Kerala, may not be necessary in view of the orders furnished in para 335

For orders pl.

Mvm
22/8/69

Kind reference is invited to paras 337 to 349 N.F of the Closed file PWD 21 MKR 61 Part-II. In accordance with the discussions made therein & exhaustive para wise remarks of this State on the General points raised by the Govt of India in Ministry of Home Affairs have been furnished* with a hope that Govt of India would give a suitable reply to the Govt of Kerala in the matter. But as may be seen from the Reminder from the Govt of Kerala that Govt does not appear to have been Replied. In the circumstances Govt of India may be addressed to address Govt of

* Flag 'C'

WD 01050—GPB—8,00,000 13-12-65

Kerala in the matter. In the mean while we may also reply Govt of Kerala that detailed remarks on each of the points raised have been furnished to Govt of India and they may address Govt of India in the Ministry of Home Affairs.

22/8/69 In this connection I invite reference is also invited to this Govt letter No PWD 23 MKR 69 dated 11-7-69 (page 6 ref.) the question appears to be under examination by the Govt of India.

—10 (Govt)

22/8/69 Please see the reminder from the Kerala Govt please below. This is a reminder to their letter dated 24-8-68, which may be seen at p 193 of the file PWD 21 MKR 61 (Pg E) please below. In this regards pages 325-330 of the same file may please be seen. We (Pg F) have not furnished any reply in the matter to Kerala Govt. The matter has been taken by the Kerala Govt with the Govt of India by supporting the inclusion of this issue in the Agenda of the Southern Zonal council. Our replies in the matter have already been furnished to Govt of India on this. Please see p. 280-284 of the file PWD 21 MKR 61. The Kerala Govt. had also moved the matter with the Ministry of IDP. Please see Pg H

M. G. S.	Subject:	File No.

Secy. PWD.
No 6632 Date 25.8

nos 2-6 ante. and also the letter at ℘ 8 cg. Just as was done in the case previous letters, we may allow the letter of Kerala Govt to lie over in the present.

DS)
Secy P. WD

25/8/69

24/8

—11—

Please see SC/A on para 328 in file PWD 21 MKR 61 (Part-II) n.f. Does the project (Kabini), as being executed now, submerge any lands at all in Kerala?

31/8/69

1/9/69

—12—

Yes. The Kabini Reservoir submerges lands in Kerala. Please see the report of the CE at ℘ 102. of the file PWD 21 MKR 61 Joint surveys of the area under submergence are being conducted by the Kerala PWD and Kabini Circle of Mysore.

A

Secy. PWD.
No 6910 Date 3/9

DS)
Secy P. WD

2/9/69

2/9

WD 01050—G9B—8,00,000 13-12-65

—13—

Please see the letter from Govt. of Kerala at p38 of placard below. It was taken up with Trust the CE. Irrigation Kerala ~~[illegible]~~ with for discussing with the CE Irrigation Tyagi on only matters of common interest. The CE(Bombay) may be permitted to discuss with the CE(Kerala) but the discussions should be restricted to Kabini Project only, since Kerala contributes interest in Cauvery Basin is only in Kabini contribution.

A

DS
Secy

4/12/69.

Dy
PS

—14—

The note above is for favour of perusal. 'A' above may kindly be approved.

Kerala has only a small project in the upper reaches of the Kabini river; the provision for using some waters by Kerala has been made in our Kabini Project Calculations. Therefore, it is better to dispel any doubts Kerala may have against Mysore's intentions. Kerala and Mysore can then put up a joint front against Tamil Nadu.

4/12/69

CM.

M. G. S.	Subject:	File No.

— 15 —

The chief engineer concerned may discuss without committing the Govt in any way

V. Pasha.
6/12.

I have already informed CE (I) south over phone. A formal letter may also go

6/12/69

DSI

6/12/69.

— 16 —

Issue the urgent proceedings. TODAY

9/12

9/12

Issued 12-12-69

Letter No KRP/541 TAD/69.70/3264/ dated 24-11-69 from the CE1 (S) Bangalore.

— 17 —

~~x clag A Bc~~

x. Flag ABC in file no PWD 21 MKR 61 kept below

The letter of the CE (S) requesting Copy of letter PWD. 21. MKR 61 dated 22-8-62 and along with Two references stated therein. A Copy of the letter x dated 22-8-62 and the Two reference letter dated

Subject:	File No.	M. G. S.

WD 01050—GPB—8,00,000 13-12-65

PWD 23 M(R 69

7.3-62 and 9.5-62 may be issued. if approved. A draft is kept below for approval.

B.V. Sarky
17/12/69

17/12/69

19/12

Issued 23.12.69.

-18-

The file may be kept in Cus

29/12/69

30/12/69

PWD 23 MKR 69 (Supl)

dt 29-8-69

No 11/17/69-TE Govt of India
Central Water and Power Commission

-19-

1) Submitted for perusal pl. The file, No PWD 23 MKR 69 in which subsequent matter was dealt with has been submitted to Secy PWD on 11/9/69. On return of this file these communications will be placed in the file. In the meanwhile we may ask the CE, (S) to forward the index map, as desired by the G.S. A draft is kept below for approval pl.

28/9

29/9

Issued 26 9-69

-20-

2) A draft reminder is kept below for approval pl.

8/11/69

7/11/69

Issued 13-11-69

letter NO KRS/MISC/1862/73 dated 19-11-69 from the CE(S) Bangalore.

21

3) The Govt of India in their letter kept below have requested for Two copies of Index Map and the same has been sent now from the CE(S). If approved the same may be transmitted to GOI. A draft is kept below for approval

B.V. Subbaraya Setty 22/11/69

MR 22/11

Issued 5.12.69 24/A

— 22 —

4) These papers may be merged with the main file, PWD 23 MKR 69 Since the file has been received

YPR

B.V. Setty 15/1/70

MR 15/1/70.

5) Typed/ pool may pl type 3 copies of Pages 3

Letter No KRP/54/PII/69-70/FAC/2475 dated 3.3.70 from the CEI (South) Bangalore

-23-

23) Please peruse the report of the CEI (South) regarding the Joint Surveys of Submergible area in Kerala State under Kabini Project, kept below

further report may be awaited

9/3/70. No copy the Minutes may be awaited

B.S. Sahi 9/3/70

24) The report of Joint surveys of Kabini Reservoir with proposals as furnished by the CE may be perused.

11/3

DS) -24

25) The CE will be requested to complete the joint surveys by 4/70, as programmed and to submit the report to Govt.

12/3/70

26) For (favour) perusal of CE's letter at page 51 of (flagged PWD) reg: joint Surveys Kabini Submergence in Kerala

(VEERENDRA) Secy PWD (P.A.G.I.) Secy PW

Secy PWD 18/3 (VEERENDRA) 18/3 CM (287) CM Addl. Secy 18/3/70

Signature 20/3/70

IFTCKLS AHMED, 18/3/70

Ref Para Page.

27) A draft letter addressed to CEE (South) is kept below for approval pl.

21/3/20

B.S. Sarkar
21/3/20

4
23/3

Issued 25-3-20

28) A draft reminder is kept below. for approval

6/6/20.

B.S. Sarkar
6/6/20

4
8/6

Issued 10-6-20

Letter No. NO7 (4)/70-DW II dated 18-7-20 from Gr 9, Delhi

29) Submitted for perusal. A draft is kept below for approval

23/7/20.

B.S. Sarkar
23/7/20.

4
29/7

Issued. 27/7/20

1) Letter No IPH/8-9/GN(E)/20-71 dt- 27-7-70 from CE (G) Bangalore
2) Letter No KRP 54/TAC/841 dt 23-7-70 from CE1 (South) Bangalore

30) Please perine the letters referred at- 1 and 2 above.. A draft letter addressed to Chairman water and Power Commission is kept below for approval.

Regarding reference at- 2 above no action is required at this since Comments of Chief Engineer have already been called for on similar representation at- page-63.

3/8/70

3/8/70

Nr

4/8.

Letter No: DR/TAD 2/KRP/40/4676-78 dated 2-11-70. from the CE1 (South) Bangalore

-31-

1. Please perine the joint Survey report. Submitted by CE1 (South) with reference to Note 25 above which is self explanatory.

24 Submitted for orders pl.

7/11/70

7/11/70

32) Please see letter of the Chief Engineer Irrigation(South) at Page 75 CF. The Kabini Reservoir submerges some areas in Kerala State. Joint surveys of the submergence area were taken up by the PWD of our State and of the Kerala State. After these joint ~~inspections~~ surveys, taking into account the back water levels, the Chief Engineer has indicated the level of the land upto which lands will have to be acquired at various points. The statement of the Chief Engineer in this regards may be seen at page 70 Cf. Normally it is presumed ~~in original conception~~ that the lands that will have to be acquired due to ~~throughout~~ the water spread ~~upto only~~ one particular dead level. Due to the actual ground levels in the river bed at various points upstream of the reservoir and the nature of gradient of the river valley such a dead level is not possible. ~~through out~~. The levels will be slightly differ~~ent~~ from point to point depending on the above factors. Therefore from the Statement of the Chief Engineer at page 70 it can be seen that though at the ~~time~~ dam site proper the land that will have to be acquired are upto RL 2286.10, the land that will have to be acquired at the extreme point of the submergence area in Kerala State will be at RL 2311.00, Actually the levels differ from point to point as could be seen from that statement. The exact picture of the lands that will be get submerged, the property that will come under water can be determined only after these levels are marked on the ground. Such demarcation will have to be done in Kerala State with the cooperation of the Revenue Department of that State. It is not known if under the present circumstances when there is a controversy regarding the construction of the Kabini Project whether the Government of Kerala would agree to depute any of its staff for such a purpose. Since that Government had made available the services of its PWD officers for the joint surveys we may find out from them if similar assistance could also be had from them with regards to the demarcation of the actual back water levels on the ground and we may take further action in the matter after awaiting for their reaction. A draft addressed to the Government of Kerala is placed below for persual and approval.

DS

Secretary PWD)

(S.K.Mohan)
US. PWD (Tech)

1) The area under submergence in Kerala state is reported by the CE Irrign (South) as 1450 acres

originally this figure was reported as about 250 acres, probably based on topo sheet study, which is rough. The CE has not sometimes who furnishes classification such as forest land, cultivated land etc, out of 1450 acres. This may be called for.

2) The draft letter to Kerala Govt for joint survey and demarcation, may please be approved.

Secretary (WR)

11/11/70

-34-

Submersion is not imminent as the construction has not reached a critical stage. We may wait for a few days to size up the situation regarding clearance for a storage of 19.2 TMCft.

S. Vaidyanathan 11/11

DS I

12/11/70

21/11

-35-

3) with reference to orders at Note 34 above. it is for orders whether the file may be kept in Secy's for until further orders.

B. Sankaran 30/11/70

30/11/70.

Secy.

21/11

G-B—8,00,600 13-12-65

Do letter No. DR. TAD2/KRP/40-70-71/5476/Lal dated 18-12-70 from CE (Sanction

-36-
letter

36) The stage previous referred by the Chief Engineer has been received and kept in page 75. Cf. In this connection please perune fr notes at ~~para~~ para 32 to 34 Supra. In view of orders at para 34 Supra no further action appears necessary. For orders pl. However a reply to the CE appears necessary.

Lashy 23/12/70

MW 23/12/70. ~~D/S~~

-37-

37) CE may be replied as per note 34, ante.

Secretary (PH)

RM 24/12

-38-

38) May be referred to the Expert Committee on Canvey projects.

26/12

DS

-32-

39) The file may be referred to GI Section with reference to Note 38 above.

MW 29/12/70.

29/12/70

GI Sec) DS

Dr. on Tour

PWD (GI. Irrgn). No. 473 | Date 30.12.70

30/12

M. G. S.	Subject:	File No. PWD 4731/G1/70.

Receipt No. 4731 dt 30.11.70 from Major Irrgn Section.

-40-

40) Majn Irrgn. Section file No. PWD 23 MKR 69 is placed below for perusal & Note 38 w.r.t. Page 11. It is for orders whether the Copies of letter dt. 2.11.70 may be forwarded to the Dir. WRDO who is the Convenor of the Expert Committee or the CE. (S)* *who is also a member of the Committee I may be asked to place this matter before the next meeting of the Expert Committee, since there is an index map copies of which cannot be supplied by us.

31/12/70.

Copy of letter will be sent to the Director WRDO for further action.

31/12 JSI

31/12

-41-

41) The CE I (S) may be requested to place this before the Experts committee on Canvas Projects, with a copy of the letter marked to the Director WRDO who is the Secretary of the committee.

31/12/70

-42-

42) With reference to the above a draft addressed to the Chief Engineer IP (Santa) Bangalore is kept below for approval.

B.V. Sastry 4/1/71

2/1/71 Approved 6.1-70

4/1

P.T.O.

WD 01050—GPB—8,00,000 13-12-65

-43-

Since no reply has been received from C.E.I.P South,
draft reminder is putting for issue..

23/6

Issue

23/6/71

Issued on 28/6/71

-44-

The river Kabini takes its origin in Kerala State. The Kabini Reservoir when completed submerges lands in Kerala State. Previously it had been estimated that about 250 acres of Forest lands would come under submergence by the Kabini water spread in Kerala State. Detail joint surveys by Officers of Mysore P.W.D. and Kerala P.W.D. have been conducted and the backwater effect has also been studied. As per these surveys conducted jointly, area comming under submersion within Mysore State limits is 18,430 acres and the area comming under submersion in Kerala State limits is 1,450 acres.

The Chief Engineer, Irrigation (South) in November 1970 had intimated to Government these details and had suggested that the land comming under submersion in Kerala State be actually demarcated on the ground by the Revenue Department, of Mysore State jointly in consultation with the counterparts in Kerala State. This proposal of the Chief Engineer was examined and the Chief Engineer was informed that the matter relating to the joint surveys of the submersible area in Kerala State under the Kabini Project be placed before the Experts Committee on Cauvery matters. This subject was placed before that Committee for its views in the recent meeting. But, due to lack of sufficient time, the same had to be deferred.

it was due to lack of sufficient data on back-water curve
15/7/71

Initially we had taken up the construction of the Kabini Reservoir for a storage of 12 T.M.Cft. and the same had been approved by the Government of India in 1958. Subsequently we have increased the storage under this reservoir to 19.2 T.M.Cft. and have proped it as an offset against Bhavani Reservoir constructed by Madras. The Kerala Government have been asking us to furnish with a copy of the Project report. We have not so far complied with the request. They had even objected to the action taken by Mysore in undertaking the construction of Kabini Reservoir without consulting them. We have taken a stand that at the time of 1924 agreement, the then Government of Madras did not contemplate any schemes on Kabini and as such, the Kerala Government who was the successors to the old Madras State cannot ask for any concurrence of this State for taking up the Kabini Project in as much as, such a concurrence was not contemplated at the time of 1924 agreement with regards to the construction of any reservoir by Mysore on Kabini. In other words, we have taken

PWD 23 TKA 69

the stand that under the 1924 Agreement, Kerala State is not entitled to use of any waters of the Kabini river. ~~and~~ This amounts to our acceptance of the 1924 agreement as far as Kabini is concerned. We cannot take up an attitude of denying of the 1924 agreement in the case of Hemavathi Project and accepting the 1924 agreement in the case of Kabini Project. Such a stand would be inconsistant. Further, the main dispute as far as Mysore is concerned is with TamilNadu and in this regard, Kerala is one with us and it would be perhaps a good stratagy to join forces to the extent possible ~~in~~ this Cauvery dispute with Kerala as against the Tamil Nadu. Apart from this, we are contemplating the completion of the Kabini Reservoir and of storing water by 1972-73. This will mean, submergence of lands in Kerala State. We cannot submerge lands in the territory of another State without their consent. Such a consent is necessary if we have to complete Kabini Reservoir and store water in it. Perhaps Kerala State may also agree to the acquisition of the lands under the Kabini Reservoir if we agree to consider their reasonable demands on the waters of Kabini. As it is we are completely in dark as to what the proposals of Kerala are on the Kabini river. It may be desirable to know from them the details and also to sound them regarding the acquisition of lands of Kerala State comming under submersion. Before the matter is taken up in correspondance, it may be desirable to probe the atmosphere existing in Kerala in these matters by informally discussing these subjects with the concerned Officers of Kerala Government. This matter was discussed by the Addl. Secretary, P.W.D. with the Secretary, P.W.D. and it was agreed that we may address ~~x~~ the Secretary, P.W.D(Irrn), Kerala in this matter. A draft D.O. addressed to Sri.Viswanath Iyer, Secretary to Govt. of Kerala is placed below for perusal and approval.

(S.K.Mohan),
Under Secretary to Government,
P.W.D.(Technical).

Addl. Secy., PWD
No. 1361 Date 15/7.

DS†

Addl Secy P. WD)

Note-45 15/7/71

I think his name is Vishwanathan Nair. Pl. check-up, before issue of fair copy. Thereafter, Secy may pl. see & approve draft. 15/7/71

Secy, PWD.
No 2874 Date 15/7

Secy Irr† 5. Viswanath 19/7

DS†

Issued on 20-7-71

Kalaiwi project - Submersible area in Kerala State — Joint Survey — Regi

No Reply from Govt. of Kerala has been Received so far. Draft Reminder is put up for approval.

6/8/71

Wait for a week more.

6/8

- for orders to issue draft Reminder put up already, as no reply from Govt. of Kerala has been Received so far.

16/8/71

B.S Sah
16/8/71

DS)

17/8

17/8/71

Issued on 23/8/71.

Ref. No. 85 CF. Receipt. Letter No. 10836/IR 5/71/108 dt. 18/8/71 from Govt. of Kerala.

The Receipt of letter from Govt of Kerala at page 85 CF may please be seen. This letter is in response to our letter at page - 82 CF. Submitted for perusal and orders.

23/8/71

Next page

Kabini project — Submergible area in Kerala State — Jt. Survey Re.

Note-46

Kindly See our letter dated 20-7-71 at page 82 c/f. and also letter dated 23-8-71 at page 85 c/f. The Govt of Kerala have not indicated the date convenient for discussion. However we may await their reply with reference to our recent letter dated 23-8-71 at page 84 c/f and D.O. letter from the Secy P.W.D. to the Secretary to Government of Kerala (Wales and power department (dated 20-7-71 vide page 82 c/f)

Addl. Secy., P.W.D. No. 1878 Date 27/8

B.S Sorky 26/8/71

Addl Secy P.W.D)

DM 26/8/71

Urgent-

Pl. speak

28/8/71

DSJ

Note-47

Secretary may please see the reply to his D.O. letter on page 82 c.f. at page 85 c.f. from the Government of Kerala. They have indicated that they have no objection to a discussion being held but have brought it to our notice that the discussion is not likely to be useful until the Kerala Government examins the details of the Kabini project.

The Government of Kerala have been asking us for a copy of the project report on Kabini and we have been refusing to send it so far. However, I do not see how we can make them agree to a submersion of their land

Kabini project - Submergible area in Kerala State — Jt. Survey Re:-

without their examination of our project and without getting some assurance from us, that the development in their State in the Kabini basin will not be hampered due to the construction of our project.

The intentions of Kerala Government appear to be to utilise at least 40 TMCft. of water or even more in the Kabini basin of Kerala State. 15 TMCft. of this is perhaps earmarked for irrigation and the balance for Westward diversion for production of power. The yield with 75% dependability at the Kabini reservoir site is stated to be of the order of 88 TMCft. If Kerala utilises 50 TMCft., even then 38 TMCft. will be left for utilisation at Kabini, supposing for a while that total abstractions upstream of Kabini dam site will not affect the rights of ~~Kerala~~ Tamil Nadu. This alone is an impossible supposition for no Tribunal will deny the rights of both Kerala and Tamil Nadu to the waters. A Tribunal may, however, not permit a Westward diversion of waters, which is a most precious commodity for irrigation, for purposes of power generation and waste into the Arabian Sea. This also appears to be the thinking of the Krishna Godavari Waters Tribunal in the case of Maharashtra who have ~~dominated~~ demanded a very large part of the waters to be diverted Westwards.

The position therefore that may arise finally is, perhaps that Kerala will be allowed to utilise 15 TMC.ft. of water for irrigation, Mysore between 20 and 30 TMCft. and the balance will be allotted to Tamil Nadu for their existing irrigation. This, however, can only be a guess because it is not possible to read the mind of a Tribunal when one is constituted. We can however discuss this with Kerala and convince them that by the construction of Kabini

project we will not be materially affecting their rights as far as irrigation is concerned. We can also argue that even if their West Ward diversion is accepted, Mysore can restrict its utilisation of waters to a limit of whatever is allotted by the Tribunal because the capacity of the Kabini reservoir is a mere 19.2 TMCft. only. Kerala Government should have no apprehensions in permitting the construction of the Kabini project.

The detailed report which has been sent to Government of India for clearance for utilisation of 63 TMCft. of water will be sent to the Government of Kerala as a preliminary to the starting of a dialogue with them. The Governor also will have to be kept informed of this situation as it is an Inter State matter of great importance.

Iftekhar ahmed
1/9/71

Secretary, PWD)

Note-48
Noti continued

I am told that, even if we reduce the Capacity of Kabini reservoir considerably, we will still be submerging lands in Kerala due to the peculiar topography in that area. Therefore any suggestion to construct Kabini dam to partial height is not workable.

Iftekhar ahmed
1/9/71

Seen PW+E

Note-49

We may await the Supreme court decision on Tamil Nadu's petitions and Kerala's applications.

DS 7/9/71

Addl Secy 7/9/71 Secy 4.9

Kabini project Submergation area in Kerala State — Jt. Survey Rel.

L.D. may kindly see Note 49 ante and make available a copy of the decision of the Supreme Court regarding Kerala's application on Tamil Nadu petition

&

1979.

14/9/71

10/9/71

LAW 6435/71
NIGT

Note-51.

I have sent a telex message today to New Delhi to obtain the copy. It shall be forwarded to P.W.D. immediately it is received.

20/9/71

4593
SECTION
No. 3806/2
Dt. 21 SEP 1971

Sri RN
21/9/71

P.WED

21/9/71

L.D. Note above is for kind perusal and orders.

As 21/9

The receipt of the order of the Supreme Court by LD may be awaited.

22/9/71

22/9/71

Kabini project - Submergible area in Kerala state - Jt. Survey of (PWD 23 MKRbg

Note 52

Kindly See Note 51 NF 9 Law Dept.

The file may please be marked to L.D. for furnishing a copy of Supreme Court Judgement on Kerala's application on Tamil Nadu's petition.

&

5/X/71.

B.V. Lad
5/10/71

Note 53

The request of Kerala to implead themselves as a party to the suit filed by TN. in the Supreme court was dismissed and the Kerala have now filed a suit on their own. LD may kindly furnish a copy of the same

LD)

5/X

Note - 54

Law Department.

A Copy of plaint as filed by Govt of Kerala before Supreme Court is obtained from Indexing and is placed in the file for reference

15/10/71

Note 55 P.W.D

The plaint is taken out and placed in the other file

19/10/71

15/10/71

R. & I. SECTION
LAW & P.A. DEPT.
No. 33973
7 OCT 1971
Section 4

7/10/71

L.D. Cell Dy. 7/10/71
to
6919

R & I.
D. L.
No. 41949
Date 19
R.I.

P.
No. 50/3.

21/10/71

PWD 13LCM71

Kabini project - Submergible area in Kerala State.

-55-.

The decision on the file put 13 L CA 71 may be awaited if approved. Ref. to Note 55 ante.

21/X/71 D/S

21/10/71

B.S. Sastry 21/X/71

N. No. 86 Receipt. letter No. DR/ TAD2/KRP.40/71-72/5879-80 dated 8/12/71 from C.E. I. South, Bilar

-56-

Please see the letter of C.E. South at page 86 CF. C.E. Reports that according to discussion held on 6-12-71 with Secy. and Addl. Secy. (WD), the Survey staff of this State required to Conduct the survey in Kerala State in order to assess the buildings and properties in Kerala State that may come under Submersion due to filling up of Kabini Reservoir for which it is reported, the permission of Kerala Govt. is necessary. Therefore, CE requests Govt. to move the Kerala Govt. for according necessary permission to the staff of this State to Conduct the Surveys. We may perhaps agree to CE's proposal and address the Kerala Govt. for Such permission. Draft letter to the Govt. of

Kerala project – Submergible area in Kerala State.

P&D. 23 HWM 69.

Kerala put up my case approval

14/12

-57-

3-12 Sarkar

Discussed with S.E. Designs. 14/12/71

The letter need not issued at this stage and may be not advantageous from the point of view of this State

15/12/71.

Sl. No. 88-90 C/F Receipt.

Letter No. 13117/125/70/WBP dt 8/12/71 from Govt. of Kerala

-58-

Letter of Govt. of Kerala at pages 88-90 C/F may please be perused. In view of the circumstances stated therein, Govt. of Kerala feels that no useful purpose will be served in conducting the Joint Survey of Submergible areas of that State and it is unnecessary to correspond further.

For perusal.

16/12/71

16/12

Note-59.

The letter dated 8-12-1971 from the Govt. of Kerala addressed to the Mysore Govt. relating to the Kabini Project may please be perused at Page 90 of the case file with reference to the D.O.letter of our Secretary addressed to the Secretary, Kerala Govt. on 20-7-1971 placed at Page 82 of the case file.

The sum and substance of the letter is that Kerala Govt. feels that unless the project report relating to the Kabini Project is sent to them and they study the entire project, they ~~did~~ do not agree for any joint surveys to be conducted in respect of area that may be submerged owing to storage of water in Kabini Dam. As at present, some preliminary data has already been collected by the joint surveys, but we wanted some definite information regarding the cultivable area which may be submerged and the villages that might be affected owing to submersion. This information may perhaps be obtained un-officially. For perusal.

A

16/12/71
(M. Channappa)
DS.PWD.(Irrgn).

1-86 20/DS1/71

Addl.Secy.,PWD:

-60-

1) A few Surveyors of ours still seem to be in Kerala territory. We may request them to unofficially collect the wanted information.

2) The Kerala Govt's letter (P.90) raises the fundamental question as to the limit of height upto which, and the speed with which we may proceed with the construction of the dam and the canals, ~~work~~ under the limitations of submersion of Kerala territory and the prospects of the matter going before a Tribunal. We may refer this matter to the CE/IS for a thorough study and send a note to us with the remarks of the TASC.

17/12/71

Secy. PWD. No 5501 Dated 17/12

Secy Irrgn

-61-

DS Recorded 18/12

-62-

DS I

put up a draft Letter to

18/12/71

US(T). CE(I).

20/12/71

-63
DFA . at Pg 4

~~DS~~ 24/12

(-20) 76/DS(1)/71 Addl Secy P.WD) (Ml) 22/12/71

-64-
23/12/71

Addl. Secy., PWD
No. 2853 Date 23/12

-65-
Issue (Ml) 24/12/71

24/12
Issued on 29/12/71

66) Draft D.O. Reminder put-up & CE. South,
BS 28/12

may kindly
29/12

67. 29/12

68.

68) The Government of India have constituted an Inter-State Water Disputes Tribunal in the case of Narmada river. The Tribunal which was consituted in October 1969 had framed certain preliminary issues relating to its jurisdiction and similar matters. The Tribunal pronounced its decisions on these preliminary issues in February 1972. Among other things, the following issue is relevant in the case of the construction of the Kabini reservoir by Mysore State submerging lands in Kerala. The issue framed by the Tribunal was as follows:

"Whether the proposed execution of the Navagam project with F.R.L. 530 or thereabove or less involving consequent submergence of a portion of the territories of Maharashtra and/or Madhya Pradesh can form the subject matter of a 'Water Dispute' within the meaning of the Section 2(c) of the inter-State Water Disputes Act".

The State of Gujarath had proposed the construction of a dam at Navagam across the river Narmada with F.R.L. 530 or there-above involving submergence of a portion of territories of Madhya Pradesh and Maharashtra. It was argued by Mr. Phalkiwala, on behalf of the State of Madhya Pradesh that Madhya Pradesh owned its land within its territorial limit and that its title was absolute and such ownership was not subject to any constitutional limitation and that the State of Gujarat cannot claim to inundate the land in the State of Madhya - Pradesh and invade its constitutional right of title to land. After ~~reading~~ hearing the arguments from Maharashtra and Madhya Pradesh, the Tribunal was of the opinion that the dominant question involved in this matter was one of apportionment of waters between the State of Gujarath on the one hand and the States of Maharashtra and Madhya Pradesh on the other hand and not the question of submergence of land, which is merely consequential. Therefore the Tribunal was of the opinion that the proposed execution of the Navagam project was a Water Dispute in terms of the Inter-State Water Disputes Act.

While discussing this question, the Tribunal have examined the aspect as to whether it is obligatory for a riparian state to obtain prior consent of the other riparian states before the execution of a project. Relevant extract from the proceedings of the Tribunal relating to this matter are placed at pages 97-100 CF. The Tribunal have held that there was no international law or principle providing that the State proposing to undertake construction must previously obtain the consent from the co-riparian state as a condition precedent to use waters within its own territory. But the Tribunal has however held, the question of submergence is a justiciable question which is a matter for the Tribunal to decide. In other words, the Tribunal feels that in the case a project taken up submerging lands in the territory of another State the matter could be treated as a Water Dispute under

the Inter-State Water Disputes Act and the Tribunal can decide as to whether such submergence can be allowed or not. This opinion of the Tribunal is to some extent in contradiction to the various authorities cited by it. According to the authorities cited by it, a riparian state can undertake works to use waters within its territories without any precondition, without obtaining consent from the co-riparian State, ~~subject to the risk of being liable~~.

We can construct the Kabini project so as to be within our rights in the utilisation of Kabini Waters and subject to the lowering of the level of storage according to the decision of any Tribunal. If this matter were to be referred for adjudication, the State of Mysore ~~xx xxxxxx~~ would perhaps be within its right to go ahead with the construction of the Kabini project. In the case of Kabini Project, we are entitled to construct the reservoir so as to impound 60% of the waters stored by Tamilnadu in their Bhavani Project. The Kabini Project as planned and under construction has a storage of 19.2 TMCFT which is strictly 60% of the storage capacity of Bhavani Reservoir Therefore considering the 1924 agreement, the construction of Kabini Dam for a storage of 19.2 TMCFT by Mysore State is fully justified. Even apart from the 1924 agreement, Mysore State has a riparian state in the Kabini Waters has a right to utilise the waters in that river and the Storage of 19.2 TMCFT for utilisation of about 30 TMCFT would also be fully legitimate. The decision of the Narmada Water Disputes Tribunal is put up for information as it is a relevant and interesting legal authority in the matter of such river water disputes.

69) I have obtained a copy of the complete decision of the Tribunal which is to be printed at P&S.E

(S.K. Mohan)
US PWD (Tech)

Addl. Secy., PWD
No. 738 Date 22/3

70) 73

71) 12/4/72

72) Seen. Have we received CE's note as per para 69?

26/4

DS I

73) Replies on the points at note 60, appears, have not been received this may be observed

29/4

74) Draft DO. Letter as in ~~two~~ D/S is put up for approval

B. V. Sastry
29/4/72

DS)

29/4

75 Issued
24/5/72

76 Not issued since received.

Letter No. DR. TAD2. KRP-40/71-72/121-22 dated 5.4.72 from C.E. I (S) Bangalore

77) P&D is for perusal and Orders.

4/5/72 78. Kind reference is invited to paras 72 and 60 of note file. The Chief Engineer Irrigation South has now furnished a detailed Report as to the back water effects of Kabini Reservoir when it is Completed and Commissioned

It is stated that adequate investigation and survey has been conducted by the Department and found that no area in Kerala would be submerged in normal course, the meeting Technical Subcommittee held on 8-1-72 have also recommended the proposals of the CE.

79 In this connection reference is invited to the Kerala Govt letter dt 8-12-71 (p. 90 of) wherein they have pointed out the rights of Riparian States of Mysore, Kerala and Tamilnadu in respect of Cauvery waters.

80 The Govt of India in their letter dt 18-7-20 (page 59 of) have called for the comments of the State Govt along with index map showing the Location of the projects

81 Replies to Govt of Kerala and Govt of India appear to be due from this Govt

B. H. Early
4/5/72

PWD 23 TKK 67

82. Please see note 60 ante. The Chief Engineer has now forwarded his note on the calculations of the back water level of the Kabini Reservoir. According to the calculations made by the Chief Engineer, there will be no rise in the level of the water in Kerala State due to the construction of the Kabini Dam. The water levels in that area will remain the same level ~~as~~ when the dam was not existing, except for about 3 miles where the water level would go up by about 1 to 2 feet. The Chief Engineer therefore has contended that there will be no extra submergence in Kerala State due to the construction of the dam and erection of the crest gates. The Technical Sub Committee of the MIPC Board also have examined this proposal of the Chief Engineer and approved the same. Apart from the question of whether submergence will be caused in Kerala State or not, the storage under Kabini Dam will be necessary only when the canal system under the Kabini is in a position to utilise the waters. The entire question relating to the Cauvery waters is before the Supreme Court. Our action to impound waters in Kabini Reservoir when the matter is before the Supreme Court may create difficulties. The work of manufacture and erection of crest gates for the Kabini Dam has already been entrusted to M/S Tungabhadra Steel Products Limited. As such, we cannot go back on it. We have to erect the crest gates and see that no submergence is caused in Kerala.. This is for kind information.

DS

Secretary PWD)

15/5/7

US PWD (Tech)

83 For examination and advice.

7/6

84 Addl Secy

In the Calculation sheet, the value of M in Manning's formula is fairly on the high side & thus the assumptions on submergence have erred on the safe side.

I entirely agree with the Cauvery Board's recommendations and the main structure as well as the Crest gate may be put thro', without causing any interstate problems by proper manipulation

050

of the crest gates 2 River Sluices. It is not necessary to keep them all the time open during floods.

By the proper regulation of the outflows & regulation of electric power sluice gate engineer may derive the outlets benefit without any submergence in Hemavathi under normal condition of flow.

CWC may look into the aspect in the meanwhile & compare regulation chart

24/6

Secy (PWD)

29/6

S. VARADAN,
Secy., P.W. & E. Dept.

H. N. NANJE GOWDA,
Minister of State for Major Irrigation.

CM

12/7

D. DEVARAJ URS,
Chief Minister.

Secy Irrt.

12/7

Addl Secy

13/7

DS (I)

CE may be addressed on it

15/7

A draft letter to the

Next page

Kabini Project submersible area in Kerala State.

PWD 23 MKR/69.

CE (South) is put up for appl.

B.S. Sahay 20/7/72

20.7.72

Issued on 27.7.72.

The file may be closed and recorded under class 'B' and fresh proposals received, if any, from the CE (S) will be worked up on a separate file.

B.S. Sahay 27/7/72

27.7.72.

115

GOVERNMENT OF MYSORE

No. PWD 23 MKR 69.

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA

Bangalore, Dated...29...July, 1972.

From

The Secretary to Government of Mysore
Public Works & Elecy. Dept.

To

The Chief Engineer,
Irrigation, (South)
Bangalore.

Sir,

Sub : Kabini Project submersible area in Kerala State.

====

With reference to your letter No. DR.TAD.2/KRP/40/71-72/121-22 dt. 5.4.72 on the subject cited above, I am directed to state that in the calculation sheet, the value of "N" in Manning's formula is fairly on the high side and thus the assumptions on submergence have erred on the safe side.

While agreeing with the Control Boards recommendations, I am directed to state that the main structure as well as the crest gates may be put through without causing any interestate problems, by proper manipulation of the crest gates and river sluices. It may not be necessary to keep them all the time open during floods. By proper gauging of the inflows and regulation of crest and river sluice gates, we may derive the fullest benefit without any submergence in Kerala State under normal conditions of flow.

Keeping in view of the above points, I am to request you to prepare regulation charts and submit to Government.

Yours faithfully,

(S.K.Mohan)
Under Secretary to Government,
Public Works & Electricity Department.

CsJ/-25.

ISSUED
Dated 27/8/72

No.PWD 23 MKR 69.

To

The C.E., I (South).

Sir,

Sub:- Kabini Project submersible area in Kerala State

--

With reference to your letter No.DR.TAD2.KRP-40/71-72/121-22 dated 5.4.1972 on the subject cited above I am directed to state that in the calculation sheet, the value of 'N' in Manning's formula is fairly on the high side and thus the assumptions on submergence have erred on the safe side.

While agreeing with the Control Boards recommendations I am directed to state that the main structure as well as the crest gates may be put through without causing any interstate problems, by proper manipulation of the crest gates and river sluices. It may not be necessary to keep them all the time open during floods. By proper gauging of the inflows and regulation of crest and river sluice gates, we may derive the fullest benefit without any submergence in Kerala State under normal conditions of flow.

Keeping in view of the above points, I am to request you to prepare regulation charts and submit to Government.

Yours faithfully,

U/Secy to Govt, PWD.

20/7/72

GOVERNMENT OF MYSORE.

Office of the Chief Engineer,
Irrigation (South), Bangalore.
Dated: 5-4-72

No. DR.TAD2.KRP-40/71-72./121-22

To

The Secretary to Government,
P.W. and Elecy. Department,
Vidhana Soudha,
Bangalore.

Sir,

Sub: Kabini Project submersible area in Kerala State.

Ref: Govt. letter No.PWD.23 MKR 69 dt.29th Dec.71 and D.O. letter No.PWD.23 MKR.69 dt.1-3-72.

Back water level computation has been done for a maximum observed flood discharge of 1,18,000 cusecs at the dam site with and without crest shutters. With crest shutters the rise in water level due to back water effect at the Mysore Kerala border i.e. between C.S. 22 and 23 is of the order of 1.28 ft. over the natural flood level. Without any structure, and without crest shutters the effect is negligible. A detailed note explaining the method of back water level computation is enclosed along with the statement of backwater levels.

As there is no submergence in the Kerala State limits due to the structure alone, the dam and appurtenant works can be completed including the installation of crest shutters and river sluice gates for achieving irrigation benefits early. The crest shutters & river sluice gates will be kept open during the flood season till the issue of allocation of waters is settled.

The subject was also placed before the Technical Advisory Sub Committee held on 8-1-1972 and its recommendations is enclosed.

Yours faithfully,

for Chief Engineer,
Irrigation (South).
4.4.72

O.C. Appd. by C.E.

Encl: Note &
Stts.

NOTE ON THE CALCULATION OF BACK WATER LEVELS IN KABINI RESERVOIR.

The Kabini Reservoir Project contemplates construction of a Reservoir across the River Kabini near Bidarahalli Beechanahalli site to store 19.2 T.M.Cft.

The catchment area of the Kabini river at the Dam Site is 627 Sq.miles. The design flood at the Dam site is about 1,94,000 Cusecs which is 60% above the observed flood discharge of 1,18,000 cusecs during the year 1924.

The River Kabini rises in the Wynad Taluk of Kerala State and flows through a distance of 132 miles before joining the river Cauvery at T. Narsipur.

The River Kabini is formed by several large streams rising in the peaks of western ghats. Prominent among them being (1) Panamaram Puzha (2) Karamathi Puzha and (3) Manantoddy Puzha. These streams after flowing for about 25 to 30 miles join together at about 5 miles above the Mysore-Kerala border. Another big stream known as Bavali stream joins the river at the Mysore-Kerala border. This combined river then forms the boundary between Mysore and Kerala State for a distance of 6 miles upto Kannegal Hole.

The bed level of the river at the Dam Site is R.L. 2204.00 average. The full Reservoir level is fixed at R.L. 2264.00. The maximum area of water spread is 23.4 Sq.miles.

Joint surveys have been conducted by Mysore & Kerala PWD staff for

(i) Setting up of the base line on both the banks of the river in Kerala State limits i.e., from Kudal point to Kannegal Hole.

(ii) Taking cross sections of the River lying within Kerala State limits from Kudal point to Kannegal Hole.

4/94

Apart from the above work cross sections of the river from the Dam site upto Mysore State Border has also been taken.

In all, 34 River Cross sections have been taken from the Dam site upto Kudal point. Out of these 34 cross sections 22 river cross sections are within Mysore State limits, and the balance 12 cross sections are in the Kerala State limits. From cross section 22 to cross section 29, the right bank is in Kerala area while the left bank is in Mysore area. Beyond 29th cross section the entire area is in Kerala State. A plan showing the cross sections is enclosed herewith.

..2/2..

CALCULATION OF BACK WATER LEVELS:

The F.R.L. of the Reservoir is 2284.00. The maximum flood discharge considered in the Project Report is 1,94,000 cusecs at the dam site. The Spillway capacity at F.R.L. is 1,54,600 cusecs inclusive of the discharge through the River Sluices. However the maximum discharge observed so far at the dam site is 1,18,000 cusecs. As such maximum observed flood of 1,18,000 cusecs, has been considered in the back water computation.

The deepest bed level of the river at the 22nd cross section is 2256.34 and at the 29th cross section 2280.900. As the F.R.L. is above these river bed levels, there will be some back water effect in the Kerala territory also. As such, the back water computation is carried out upto 29th cross section to assess the area of submergence.

The computation is done for the following two conditions.

(i) Maximum discharge of 1,18,000 cusecs at dam site with crest shutters and river sluices regulated to maintain F.R.L. of 2284.00.

(ii) No crest shutters and river sluice gates open throughout the flood season and allowing the flood over the completed spillway crest at R.L.2244.00 for a maximum discharge of 1,18,000 cusecs at dam site.

Flood routing is done for an observed flood of 1924 with maximum duration of 16 days. The routed level is 2275.26. The spillway is capable of discharging entire flood of 1,18,000 cusecs, with water level R.L. 2276.00. As the difference between the routed and above level is very small, the latter level viz. 2276.00 is considered for the back water computation.

METHOD OF COMPUTATION:

The computation is done by standard step method assuming a value of 0.035 for rugosity co-efficient (N) in Manning's formula. The frictional gradient is calculated at each cross section adopting Manning's formula.

$$V = \frac{1.486}{N} r^{2/3} \times s^{\frac{1}{2}}$$

Where V is the velocity in ft/sec.
N = co-efficient of rugosity, r = Hydraulic mean depth, s = slope.
Substituting the above values this simplifies to

$$s = 0.035726 \times \frac{1}{R^{4/3}} \times \left(\frac{V^2}{2g} \right)$$

Loss of head due to friction is worked out between the reaches considering the average value of s.

..P/3.

110

In considering the discharge, due consideration is given to the discharges contributed by minor valleys based on proportionate catchment area. Due to this the maximum discharge reduces from 1,18,000 at the dam site to 86957 cusecs at the 29th cross section.

The difference between the back water level and F.R.L. at the 29th cross section is 22.400 ft. This rise in water level is not due to the formation of the reservoir alone but mainly due to the high bed level, the deepest bed level at this section being 2280.90.

To assess the area affected by the back water the flood level has been computed between 18th and 29th cross sections for the respective discharges corresponding to a discharge of 1,18,000 cusecs at the dam site. Manning's formula has been used in the calculations. However it is difficult to evaluate the correct bed slope due to possibility of taking levels in the local depressions. As such, the flood level is computed at the 18th cross section for an average slope and there onwards the flood levels are fixed by energy line principles.

Condition: a) With a discharge of 1,18,000 Cusecs at dam site and with regulationof crest and river sluice gates to maintain F.R.L. of 2284.

Under this condition, the computed back water levels are shown in statement No.1. From statement No.3 it can be seen that beyond cross section No.24 there is no appreciable back water effect. At cross section 22 the rise in water level is hardly 1.773 ft. At cross section 23 the rise in water level is 0.789 ft. Therefore the rise in water level at the border is about 1.28 ft.

b) Spillway completed with piers, no crest shutters, River sluices open, for a discharge of 1,18,000 cusecs at dam site.

Under this condition, the computed back water levels are shown in statement No.2. The discharging length of spillway is 160 ft. From statement No.3 it can be seen that beyond 22nd cross section(i.e., Kerala border) the back water effect is negligible when compared to the computed normal high flood levels prior to the taking up of the construction of the dam.

c) Spillway & Power Dam constructed upto crest level i.e., 2244 without piers, River sluices open, penstocks open with 1,18,000 cusecs at dam site.

Under this condition, the water level at dam site is 2269.00. The discharging length is 300 ft.

..P/4.

For condition (b) mentioned above the rise in water levels beyond 22nd cross section is negligible. Therefore with the increased discharging length the rise in water level will be practically nil.

In view of the fact that there will be practically no submergence in Kerala State, than what it would be under normal flood conditions, even without any obstruction, as explained under condition (b) above, it is recommended that the dam be completed with crest shutters and river sluice gates installed, so that the irrigation benefits could be achieved immediately the issue of allocation of waters is settled. Till then the crest gates and river sluice gates will be kept open during the flood season.

for Chief Engineer, PWD.,
Irrigation (South)

Back water levels of the Kabini Reservoir for a maximum discharge of 1,18,000 Cusecs at the Dam Site.

Cross Sn.	No.	Chainage M. F. Ft.	R.L.of water surface with F.R.L.@ 2284.00	R.L.of water surface with water level @ 2276.00	Computed flood level for a dis. of 1,18,000 Cusecs at the Dam Site.
1.	2.	3.	4.	5.	6.
0	0-	0-000	2284.000	2276.000	-
1	1-	0-055	2284.008	2276.011	-
2	2-	0-006	2284.015	2276.026	-
3	3-	5-190	2284.032	2276.058	-
4	4-	6-144	2284.043	2276.083	-
5	6-	1-210	2284.061	2276.128	-
6	7-	6-497	2284.078	2276.163	-
7	9-	4-548	2284.096	2276.198	-
8	11-	2-642	2284.099	2276.208	-
9	12-	2-583	2284.106	2276.220	-
10	13-	1-337	2284.116	2276.242	-
11	14-	5-646	2284.146	2276.316	-
12	15-	4-396	2284.169	2276.394	-
13	16-	4-513	2284.224	2276.550	-
14	17-	7-535	2284.284	2276.712	-
15	19-	7-312	2284.404	2277.017	-
16	21-	0-550	2284.506	2277.279	-
17	22-	2-161	2284.701	2277.907	-
18	23-	7-424	2286.150	2281.359	2279.300
19	24-	6-196	2287.019	2283.186	2282.000
20	26-	3-587	2288.121	2285.218	2284.390
22	28-	2-637	2291.103	2289.697	2289.330
23	11- (from Kudal)	3-190	2293.609	2292.949	2292.820
24	10-	4-418	2295.277	2294.927	2294.900
25	9-	4-094	2296.659	2296.630	2296.620
26	8-	4-318	2299.411	2299.301	2299.296
27	7-	4-212	2301.856	2301.824	2301.819
28	6-	5-603	2303.444	2303.425	2303.422
29	5-	3-275	2306.400	2306.399	2306.399

NOTE:-

1. Column 6 gives computed high flood levels when discharge at dam site is 1,18,000 cusecs but when there is no dam (no obstruction).
2. Column 5 gives Back Water levels for a discharge of 1,18,000 cusecs at dam site for discharging Spillway length of 160 ft, when there are no crest shutters but river sluices open. (Spillway completed).
3. Colum 4 gives back water levels for a discharge of 1,18,000 cusecs at dam site with crest shutters and river sluices regulated to maintain FRL of 2284.00

Kabini Reservoir Project - Calculation of Back water levels from

$S = 0.035726 \times \frac{v^2}{2g} \times \frac{1}{R^{4/3}}$ (N = Coefficient of Rugosity =.035, g = 3

Cross Sn.No.	Chainage M. F. Ft.	R.L.of water surface.	Dis. in Cusecs.	Area of cross Sn.in Sft.	Vel.in ft/sec.	$\frac{V^2}{2g}$.	R.L.of energy line.	
1.	2.	3.	4.	5.	6.	7.	8.	
0	0- 0-000	2284.000	1,18,000	2,28,140	0.517	0.0041	2284.004	7
1	1- 0-055	2284.008	1,18,000	2,48,372	0.4751	0.0035	2284.011	6
2	2- 0-006	2284.015	1,18,000	2,05,130	0.5752	0.0051	2284.020	7
3	3- 5-190	2284.032	1,18,000	2,05,706	0.5737	0.0051	2284.037	5
4	4- 6-144	2284.043	1,18,000	1,89,443	0.6229	0.0060	2284.049	7
5	6- 1-210	2284.061	1,08,527	1,93,059	0.5621	0.0049	2284.066	6
6	7- 6-497	2284.078	1,08,527	1,58,146	0.6862	0.0073	2284.085	4
7	9- 4-548	2284.096	1,08,527	3,80,973	0.2849	0.0013	2284.097	10
8	11- 2-642	2284.099	1,06,817	1,92,964	0.5535	0.0047	2284.104	4
9	12- 2-583	2284.106	1,06,817	1,56,703	0.6816	0.0072	2284.113	4
10	13- 1-337	2284.116	1,06,817	1,50,035	0.7119	0.0079	2284.124	4
11	14- 5-646	2284.146	1,06,817	1,32,493	0.8062	0.0101	2284.156	5
12	15- 4-396	2284.169	1,02,790	96,637	1.0636	0.0176	2284.187	4
13	16- 4-513	2284.224	1,02,790	1,03,004	0.9980	0.0155	2284.239	5
14	17- 7-535	2284.284	1,02,790	92,589	1.1101	0.0191	2284.303	7
15	19- 7-312	2284.404	1,02,790	69,118	1.4871	0.0343	2284.438	2
16	21- 0-550	2284.506	1,02,790	88,614	1.156	0.0208	2284.527	1
17	22- 2-161	2284.701	1,02,790	32,142	3.198	0.159	2284.860	
18	23- 7-424	2286.150	97,352	24,365	3.995	0.248	2286.398	
19	24- 6-196	2287.019	97,352	39,308	2.477	0.095	2287.114	3
20	26- 3-587	2288.121	97,137	24,928	3.897	0.236	2288.357	
22	28- 2-637	2291.103	95,311	19,345	4.927	0.377	2291.480	
23	11- 3-190 (from Kudal)	2293.609	89,981	21,131	4.258	0.281	2293.890	2
24	10- 4-418	2295.277	89,981	27,547	3.266	0.1656	2295.443	2
25	9- 4- 094	2296.859	86,957	19,580	4.441	0.3062	2297.165	
26	8- 4- 318	2299.411	86,957	19,156	4.539	0.320	2299.731	3
27	7- 4- 212	2301.856	86,957	29,890	2.909	0.1314	2301.987	3
28	6- 5- 603	2303.444	86,957	20,608	4.220	0.2765	2303.720	2
29	5- 3- 275	2306.400	86,957	21,276	4.087	0.2594	2306.659	

F.R.L. 2284.00 for the discharge of ~~1,~~18,000 Cusecs at the Dam Site.

2.2 ft./sec^2.)

Wetted premeter in ft.	H.M.D. 'R'	$R^{4/3}$	Frictional gradient. S	Ave.frictional gradient.	Distance.	Loss of head due to friction.	R.L.of energy line.
9.	10.	11.	12.	13.	14.	15.	16.
171.24	31.81	100.80	0.00000145	-	-	-	2284.004
806.21	36.49	121.10	0.00000103	0.00000124	5335	0.007	2284.011
868.12	26.07	77.29	0.00000236	0.00000169	5231	0.009	2284.020
891.95	38.15	128.40	0.00000142	0.00000189	8764	0.017	2284.037
002.75	27.05	81.21	0.00000264	0.00000203	5894	0.012	2284.049
601.13	29.25	90.12	0.00000194	0.00000229	7326	0.017	2284.066
550.334	34.75	113.30	0.00000230	0.00000212	8867	0.019	2284.085
563.29	36.06	119.10	0.00000039	0.00000134	9291	0.012	2284.097
662.88	41.38	143.10	0.000001171	0.00000078	9334	0.007	2284.104
410.54	35.53	116.80	0.00000220	0.00000168	5221	0.009	2284.113
698.791	31.93	101.30	0.00000279	0.00000249	4374	0.011	2284.124
275.304	25.11	73.54	0.00000491	0.00000385	8229	0.032	2284.156
122.948	23.44	67.07	0.00000937	0.00000714	4370	0.031	2284.187
026.710	20.49	56.07	0.00000988	0.00000962	5397	0.052	2284.239
205.933	28.88	88.61	0.00000770	0.00000879	7282	0.064	2284.303
977.033	23.22	66.25	0.00001850	0.00001310	10337	0.135	2284.438
598.94	24.63	71.64	0.00001042	0.00001446	6178	0.089	2284.527
515.28	21.21	58.70	0.00009677	0.00005359	6211	0.333	2284.860
682.904	14.48	35.30	0.0002510	0.0001739	8843	1.538	2286.398
252.816	17.45	45.25	0.0000[illegible]500	0.0001690	4392	0.716	2287.114
518.608	16.41	41.70	0.0002022	0.0001386	8971	1.243	2288.357
450.200	13.34	31.64	0.0004257	0.0003139	9950	3.123	2291.480
111.972	10.01	21.57	0.0004654	0.0004455	5400	2.410	2293.890
503.398	11.00	24.46	0.0002419	0.0003536	4392	1.553	2295.443
552.257	12.61	29.35	0.0003727	0.0003073	5604	1.722	2297.165
211.453	8.663	17.79	0.0006426	0.0005076	5056	2.566	2299.731
747.880	10.87	24.08	0.0001951	0.0004188	5386	2.256	2301.987
599.45	7.927	15.81	0.0006248	0.0004099	4229	1.733	2303.720
302.98	16.33	41.43	0.0002237	0.0004242	6928	2.939	2306.659

Kabini Reservoir Project - Calculation of Back water levels from F

$S = 0.0357260 \frac{v^2}{2g} \times \frac{1}{R^{4/3}}$ N = 0.035; g = 32.2 ft./sec^2.

Cross Sn.No.	Chainage M. F. Ft.	R.L.of water surface.	Dis.in Cusecs.	Area of cross Sn. in Sft.	Vel.in ft/sec.	$\frac{V^2}{2g}$	R.L.of energy line.
1.	2.	3.	4.	5.	6.	7.	8.
0	0- 0-000	2276.000	1,16,000	180986	0.6520	0.0066	2276.007
1	1- 0-055	2276.011	"	195123	0.6047	0.0057	2276.017
2	2- 0-006	2276.026	"	155161	0.7605	0.00898	2276.035
3	3- 5-190	2276.058	"	163517	0.7216	0.00808	2276.066
4	4- 6-144	2276.083	"	136007	0.8676	0.01169	2276.095
5	6- 1-210	2276.128	1,08,527	151419	0.7167	0.007976	2276.136
6	7- 6-497	2276.163	1,08,527	123388	0.8795	0.0120	2276.175
7	9- 4-548	2276.198	1,08,527	298559	0.3635	0.002	2276.200
8	11- 2-642	2276.208	1,06,817	157942	0.676	0.008	2276.215
9	12- 2-583	2276.220	1,06,817	123379	0.867	0.01165	2276.232
10	13- 1-337	2276.242	1,06,817	114741	0.931	0.01346	2276.255
11	14- 5-646	2276.316	"	94327	1.1132	0.02	2276.336
12	15- 4-396	2276.394	1,02,790	64968	1.582	0.03896	2276.433
13	16- 4-513	2276.550	"	67822	1.5155	0.0356	2276.586
14	17- 7-535	2276.712	"	69479	1.4793	0.0339	2276.746
15	19- 7-312	2276.017	"	48900	2.102	0.0686	2277.086
16.	21- 5-161	2277.279	"	63070	1.6300	0.04126	2277.320
17	22- 2-161	2277.907	"	22588	4.5506	0.3215	2278.228
18	23- 7-424	2281.359	97,352	17920	5.4173	0.4557	2281.815
19	24- 6-196	2283.186	97,352	30610	3.180	0.157	2283.343
20	26-3- 587	2285.218	97,137	20711	4.690	0.3415	2285.559
22	28- 2-637	2289.697	95,311	17369	5.488	0.4676	2290.165
23	11-3- 190	2292.349	89,981	19754	4.555	0.3221	2293.271
24	10- 4-418	2294.927	89,981	26678	3.3720	0.1768	2295.104
25	9- 4-094	2296.630	86,957	19227	4.5222	0.3175	2296.947
26	8 - 4-318	2299.301	86,957	18914	4.597	0.3281	2299.629
27	7 - 4-212	2301.824	86,957	29804	2.9176	0.1322	2301.956
28	6 - 5-603	2303.425	86,957	20558	4.2290	0.2776	2303.702
29	5 -3-275	2306.399	86,957	21275	4.089	0.259	2306.658

L. 2276.00 for the discharge of 1,18,000 Cusecs at the Dam Site.

Wetted premeter in ft.	H.M.D. 'R'	$R^{4/3}$	Frictional gradient. S	Ave.frictional gradient.	Distance.	Loss of head due to friction.	R.E.of energy line.
9.		10.	11.	12.	13.	14.	15.	16.
5387.150	33.595	108.30	0.000002177	-	-	-	2276.007
6422.965	30.379	94.75	0.000002149	0.000002163	5335	0.011	2276.018
6144.249	25.25	74.08	0.000004331	0.000003240	5231	0.017	2276.035
5177.33	31.58	99.82	0.000002895	0.000003613	8764	0.031	2276.066
6416.83	21.195	58.62	0.000007124	0.000005909	5894	0.029	2276.095
6315.463	23.97	69.11	0.000004124	0.000005624	7326	0.041	2276.136
4131.460	29.87	92.66	0.000004627	0.000004375	8867	0.039	2276.175
10183.70	29.35	90.42	0.000008099	0.000002718	9291	0.025	2276.200
4426.75	35.68	117.60	0.000002151	0.000001483	9334	0.015	2276.215
4015.602	30.72	96.20	0.000004326	0.000003239	5221	0.017	2276.232
4273.025	26.85	80.39	0.000005981	0.000005154	4374	0.023	2276.255
4834.150	19.51	52.52	0.000013604	0.000009792	8229	0.081	2276.336
3713.661	17.47	45.32	0.000030745	0.000022175	4370	0.097	2276.433
3658.803	18.54	49.06	0.000025924	0.000028335	5397	0.153	2276.586
2968.304	23.41	66.97	0.000018084	0.000022004	7282	0.160	2276.746
2540.016	19.23	51.52	0.00004766	0.000032872	10337	0.340	2277.086
3272.220	19.28	51.68	0.00002852	0.00003809	6178	0.234	2277.320
1332.390	16.95	43.54	0.0002638	0.00014616	6211	0.908	2278.228
1412.110	12.73	29.73	0.0005476	0.0004057	8843	3.587	2281.815
2006.453	15.25	37.81	0.0001485	0.0003480	4392	1.528	2283.343
1430.598	14.18	35.30	0.0003456	0.0002470	8971	2.216	2285.559
1397.776	12.43	28.79	0.00058030	0.00046295	9950	4.606	2290.165
2075.112	9.519	20.18	0.00057023	0.00057525	5400	3.106	2293.271
2469.88	10.80	23.86	0.00026472	0.00041748	4392	1.833	2295.104
1544.159	12.45	28.85	0.00039317	0.00032894	5604	1.843	2296.947
2205.533	8.575	17.56	0.00066752	0.00053033	5056	2.682	2299.629
2747.880	10.85	24.03	0.00019655	0.00043204	5386	2.327	2301.956
2599.450	7.912	15.77	0.00062940	0.00041297	4229	1.746	2303.702
1302.980	16.32	41.41	0.0002241	0.00042675	6928	2.956	2306.658.

PROCEEDINGS OF THE 15TH MEETING OF TECHNICAL ADVISORY SUB-COMMITTEE OF M.I.P.C. BOARD PERTAINING TO SOUTH ZONE HELD ON 8-1-1972 IN THE CHAMBERS OF ADDITIONAL SECRETARY TO PUBLIC WORKS & ELECY.DEPARTMENT.

Members Present :

1. Shri K.Basanna, Chief Engineer, Irrigation (South). — CHAIRMAN.
2. Shri Iftekar Ahmed, Engineer-in-Chief and Addl.Secretary to Govt. P.W. & Elecy.Department, Vidhana Soudha, BANGALORE. — Member
3. Shri M.V.A. Setty, Advisor to Government, Irrigation & Power, Ananda Rao Circle, Bangalore. — Member
4. Shri N.S.Govinda Rao, 88, Diagonal Road, Visveswarapuram, Bangalore-4. — Member
5. Shri A.K.Char, Consulting Engineer, 1/4 Police Station Road, Basavangudi, Bangalore-4. — Member
6. Shri P.M.Mane, Consulting Engineer, Ramalayam, Peddar Road, Bombay-26. — Member

Members absent :

7. Shri B.C.Angadi, Chief Engineer, W.R.D.O., Bangalore-9. — Member
8. Shri V.L.Narayan, Superintending Engineer (Designs)
9. Shri H.Seetharamaiah, Superintending Engineer, Hemavathy Project Circle Gorur.
10. Shri M.G.Mallappa, Superintending Engineer, Kabini Project Circle, Mysore.

— Present on Invitation.

Item No.1: Confirmation of the Proceedings of the 14th Meeting of the Technical Advisory Sub Committee of M.I.P.C.Board held on 13-12-1971 and 14-12-1971.

Confirmed subject to certain verbal corrections indicated. Corrected proceedings may be sent to all the Members.

Item No.2: Hemavathy Project - Increasing the capacity of the Reservoir to 34 TMCft. corresponding to FRL 1922- Construction of Wraprcund work to revised section - Rates for entrustment of - Consideration of.

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The subject was briefly discussed. The Chief Engineer was requested to make positive recommendations regarding the reasonable rates to be paid to the Contractors, after negotiating with them, and after examining the feasibility of the work being done departmentally.

Item No.3: Construction of an aqueduct across river Cauvery at Kanive between Ch: 13.0836 KM and 13.749 KM of Right Bank Canal of Harangi Reservoir Project - Design and Estimates - Consideration of

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D e f e r r e d.

(Page 3)

Item No.4: Co-ordinated planning of Irrigation Projects under execution in South Zone.

The detailed phased programme in respect of Cauvery Valley Projects furnished by the Chief Engineer was gone through. Shri A.K. Char, Prof. N.S.Govind Rao, and Sri M.V.A. Setty, Members, inspected Hemavathy, Harang and Kabini Projects on 5th, 6th and 7th January 1972 and suggested the following grants for these projects for 1972-73.

1.	Hemavathy Project. ..	Rs.	1,200 lakhs.
2.	Kabini Project. ..	"	600 "
3.	Harangi Project. ..	"	200 "
4.	Taraka Project. ..	"	80 "
5.	Manchanabele Project. ..	"	100 "
6.	Gundal Project. ..	"	65 "
7.	Votchole Project. ..	"	10 "
8.	Sagaredoddakere. ..	"	10 "
		Rs.	2,265 "

With these grants it would be possible to provide irrigation benefits for about 7000 acres by June 1973.

It was mentioned by the Additional Secretary that only Rs. 13.5 Crores are available for Projects in Cauvery Valley during 1972-73, as approved by the State Planning Board. However, the members were of the opinion that the present tempo of works in Cauvery Valley Projects should be kept up. For this purpose the minimum grants required for 1972-73 are recommended as under:

1.	Hemavathy Project. ..	Rs.	600 lakhs.
2.	Kabini Project. ..	"	550 "
3.	Harangi Project. ..	"	150 "

..P/2.

4.	Taraka Project.	..	Rs.	80 lakhs.
5.	Gundal Project.	..	"	65 "
6.	Manchanabele Project.	..	"	50 "
7.	Votehole Project.	..	"	10 "
8.	Sagaradodakere Project.		"	10 "
		Total:	Rs.	1515 "

With these reduced grants it was felt that irrigation benefits would not be possible by June 1973 as was previously indicated in the phased programme. Even then the above grants would be necessary to maintain the present tempo of works in the Cauvery Valley Projects to achieve the revised target by June 1974.

Item No.5: Back water effects under Kabini Reservoir.

The proposals of the Chief Engineer to complete the works including erection of crest gates and river sluice gates, were generally approved, as it was felt that by proper regulation of crest gates and river sluice gates, it would be possible to avoid submergence due to high floods in Kerala State more than the submergence that may occur without the dam.

Sd/-

(K. Basanna)
Chief Engineer & Chairman,
of T.A.S.C. of MIPCB for
(South zone)

'Copy'

B. Sunkanna

B.N.Janardhan,
Deputy Secretary to Government,
Public Works & Elecy.Deptt.

D.O. No.PWD 23 MKR 69.

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Bangalore, dated.....May.,...1972

Dear Sir,

Sub: Kabini Project - Submersible area in Kerala State -

-:-

I am desired to invite a reference to the Government letter of even number dated 29-12-1971 and subsequent D.O. reminder of even number dated 1-3-72 on the subject and to state that the report called for has not so far been received.

As the matter is very urgent I am to request you to please book into the matter personally and furnish the report immediately.

Yours sincerely,

Shri S.P. Bhat,
Chief Engineer,
Irrigation (South),
BANGALORE.

Kn/* 2/5

Not issued since received
4/5/72

B.N.Janardhan,
Deputy Secretary to Government,
ublic Works & Elecy.Deptt.

D.O. No.PWD 23 MKR 69.

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Bangalore, dated.....May.,...1972

Dear Sir,

Sub: Kabini Project - Submersible area in Kerala State -

-:-

I am desired to invite a reference to the Government letter of even number dated 29-12-1971 and subsequent D.O. reminder of even number dated 1-3-72 on the subject and to state that the report called for has not so far been received.

As the matter is very urgent I am to request you to please book into the matter personally and furnish the report immediately.

Yours sincerely,

Shri S.P. Bhat,
Chief Engineer,
Irrigation (South),
BANGALORE.

Kn/* 2/5

SUBJECT.....

.....A. on page 96 pl.....

.....

Diary No. of letter replied to.....

Mysore Government Secretariat

( )

the 195 .

Date of issue.....195 .

Signed by.....

May this be—

(i) printed?
(ii) treated as a Standing Order?
(iii) published in the Gazette, English Part?
(iv) translated?
(v) placed at the disposal of the Press?
(vi) published in the Gazette, Kannada Part?

Section

Serial No.

File No. DD 23 MKR 69

~~Proceedings of the Government of Mysore~~

~~Read~~—

D.o as dtd the 28/5(§)

Dear Sir,

I am directed to invite a reference to the ~~Order thereon.—No.~~ Govt letter of even No dated 29-12-1971 and subsequent D.O. Reminder of even No. dated 1-3-72 on the subject and to state that the report called for has not so far

been received.

As the matter is very urgent I am to request you to please look into the matter personally and furnish the report immediately.

Yours faithfully,

21/5/72

(DS)

List of Enclosures.

To

Sri S.P. BHAT

CE (S) Bangalore

Copied by

Examined by

WD 04697—GPB—PZS—1,00,000—22-3-60

EXTRACT FROM THE PROCEEDINGS OF THE FIFTEENTH MEETING OF THE NARMADE WATER DISPUTES TRIBUNAL DATED 21ST,22ND,23RD, 24TH AND 25TH DAYS OF FEBRUARY, 1972.

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xx xx xx xx xx xx xx

The next question to be considered is whether it is obligatory for Gujarat to obtain the prior consent of Madhya Pradesh or Maharashtra before proceeding to execute the Navagam Dam Project. On behalf of Maharashtra and Madhya Pradesh, it was claimed that such prior consent must be obtained and that in the absence of such prior consent, Gujarat cannot proceed with the execution of the project. In support of this proposition, both Maharashtra and Madhya Pradesh relied upon Article 1 of Madrid Declaration of 1911 which states :-

"When a stream forms the frontier of two States, neither of these States may, without the consent of the other, and without special and valid legal title, make or allow individuals, corporations, etc. to make alterations therein detrimental to the bank of the other State. On the other hand, neither State may, on its own territory, utilize or allow the utilisation of the water in such a way as seriously to interfere with its utilisation by the other State or by individuals, corporations, etc. thereof".

But Article 1 of the Madrid Declaration 1911 does not represent the correct state of law. It has been superseded by Articles IV, VI and VIII of the Salsbourg Resolution of 1961 of the Institute of International Law reproduced below :-

"Article IV: Each State may only proceed with works or to use the waters of a river or watershed that may affect the possibilities of use of the same waters by other States on condition of preserving for those States the benefit of the advantages to which they are entitled by virtue of Article III, as well as adequte compensation for any losses or damages incurred.

"ARTICLE VI: If objections are raised, the States shall enter in negotiations in view of reaching an agreement within a reasonable time. To this end, it is desirable that the States involved make use of technical expertises and need be of appropriate commissions and organisations to reach solutions ensuring maximum benefits for all concerned.

"ARTICLE VIII: If the States involved cannot reach an agreement within a reasonable time, it is recommended to submit to judicial or arbitral settlement the question whether the intended development runs counter to the above mentioned rules. If the State raising objections to the projected works or uses is opposed to any judicial or arbitral settlement, the other state remains free, under its own responsibility, to proceed with said works or uses, while obligated by the provisions of Articles II to IV."

To the same effect is the 1958 New York Resolution of the International Law Association, Paragraph 3(a) of the Resolution states:

"Co-riparian States should refrain from unilateral acts or omissions that affect adversely the legal rights of a co-riparian state in the drainage basin so long as such co-riparian state is willing to resolve differences as to their legal rights within a reasonable time by consultation. In the eventuality of a failure of these consultations to produce agreement within a reasonable time, the parties should seek a solution in accordance with the principles and procedures (other than consultation) set out in the Charter of the United Nations and the procedure envisaged in Article 33 thereof".

Articles XXIX, XXX and XXXIV of the Helsinki Rules of the International Law Association 1966 are also to the same effect:-

"ARTICLE XXIX: With a view to preventing disputes from arising between basin States as to their legal rights or other interest, it is recommended that each basin State furnish relevant and reasonably available information to the other basin states concerning the waters of a drainage basin within its territory and its use of, and activities with respect to such waters.

(2) A State, regardless of its location in a drainage basin, should in particular furnish to any other basin State, the interests of which may be substantially affected, notice of any proposed construction or installation which would alter the regime of the basin in a way which might give rise to a dispute as defined in Article XXVI The notice should include such essential facts as will permit the recipient to make an assessment of the probable effect of the proposed alteration.

(3) A State providing the notice referred to in paragraph (2) of this Article should afford to the recipient a reasonable period of time to make an assessment of the probable effect of the proposed construction or installation and to submit its views thereon to the State furnishing the notice.

ARTICLE XXX: In case of a dispute between States as to their legal rights or other interests, as defined in Article XXVI they should seek a solution by negotiation.

ARTICLE XXXIV: It is recommended that the States concerned agree to submit their legal disputes to an ad hoc arbitral tribunal, to a permanent arbitral tribunal or to the International Court of Justice".

In the Lake Lanoux Arbitration*72 the Arbitral Tribunal clearly stated that there was no international law or rule or principle providing that a state proposing to undertake works must previously obtain the consent from the coriparian States as the condition precedent to use waters within its own territory. In other words, a riparian State does not have what, in effect, would amount to a right of veto over the proposed development of the common river by a co-riaparian state.

At pages 128 and 130, the Arbitral Tribunal stated:

"In effect, in order to appreciate in its essense the necessity for prior agreement, one must envisage the hypothesis in which the interested States cannot reach agreement. In such a case, it must be admitted that the State which is normally competant has lost its right to act alone as a result of the unconditional and abritary opposition of another State. This amounts to admitting a 'right of assent', a 'right to veto' which at the discretion of one State paralyses the exercise of the territorial jurisdiction of another". "But international practice does not so far permit more than the following conclusion: The rule that States may utilise the hydraulic power of international watercourses only on condition or a prior agreement between the interested States cannot be established as a custom, even less as a general principle of law.

The same view is expressed by Herbert Arthur Smith (Treatise on "Economic uses of International Rivers" at page 151)

"(2) No State is justified in taking unilateral action to use the waters of an international river in any manner which causes or threatens appreciable injury to the lawful interests of any other riparain State.

(2) No state is justified in opposing the unilateral action of another in utilizing waters, if such action neither causes nor threatens any appreciable injury to the former State.

(4) Where any proposed employment of waters promises great benefits to one State and only minor detriment to another, it is the duty of the latter State to acquiesce in the employment proposed, subject to full compensation and adequate provision for future security.

(5) Where any proposed employment of waters by one State threatens to injure the legitimate and vital interests of another, the latter is justified in offering an absolute opposition to the employment proposed, but any difference as to the existance or non-existence of such a vital interest should be regarded as a justifiable dispute suitable for arbitration, judicial settlement, or reference to the Council of the league of Nations. If the Tribunal or the council finds that such a vital interest in fact exists, no economic or other advantage to the former state can justify it in proceeding with the works proposed. If, on the other hand the tribunal or the Council finds that no vital interests are affected, the works should be allowed to proceed upon payment of compensation and upon such other terms as the tribunal or the council may consider just".

The same view has been expressed by C.B.Bourne --

"More over the principle of prior consent has recently been dealt some hard blows. First, in the Lake Lanoux Arbitration, Spain had argued that France could not undertake a diversion project upstream in French territory without her consent, even though France had modified its project so that the waters diverted would be returned to the river before it entered Spain and damage to Spanish interests would thus be avoided. The Tribunal emphatically rejected this contention, saying that the rule of prior agreement was not "a custom, or even less.. a general principle of law" and could arise only from a treaty. Although it was dealing with a case where the development would cause no damage, nothing in its judgement suggests that it intended to confine its remarks to such situations. And, second, the principle was rejected in the recent resolutions of the International Law Association and of the Institute of International law, the work of those two bodies being the most careful and extensive study ever made of international water law. One may conclude, therefore, that international law has not yet conferred on a riparian State the right to veto developments of other riparians, whether or not those developments will cause him serious harm, and that a state may ultimately act unilaterally in the development of its portion of an international river, subject to the risk of being liable for violating the lawful rights of co-riparians under international law"./(1965) Canadian Year Book of International Law, page 187 at page 227

In the present case, therefore, we are unable to accept the contention of Madhya Pradesh and Maharashtra that the land in the respective States cannot be submerged by the proposed construction of the Navagam Project without their previous consent. On the other hand, the question of the submergence between the party States is a justifiable question which is a matter for this Tribunal to decide and adjudicate under section 5 of the 1956 Act read with Article 262 of the Constitution. As already pointed out, this view is also in accordance with the rule of international law. If the Tribunal finds that any vital interests are affected the project will not be allowed to proceed, but if, on the other hand, the Tribunal is of the opinion that no vital interest are affected by the proposed submergence, the Navagam project will be allowed to proceed upon payment of compensation and upon such other terms as the Tribunal may consider just.

S.K. Mohan,

Public Works & Elecy.,

96

Feb., 72

PWD 23 MKR 69.

Dear Sir,

Sub: Kabini Project - Submersible area in Kerala State -

- - -

I am desired to invite urgent reference to Government letter of even number, dated 29.12.71 on the subject mentioned above and to state that your reply has not yet been received.

I am to request that reply thereto may kindly be expedited as the matter is extremely urgent.

Yours Sincerely,

Shri.K.Basanna,
Chief Engineer,
Irrigation (South),
Bangalore.

S*/29.2.

ISSUED

GOVERNMENT OF MYSORE

Deputy/Under Secretary to Government,
Public Works & Elecy., Department.

MYSORE GOVERNMENT SECRETARIAT,
"Vidhana Soudha",
Bangalore, dated the _____.

D.O.NO.PWD 23 MKR 69.

Dear Sir,

Subject:- Re-tar paae 945.

***

I am desired to invite urgent reference to Government letter/memo of even number dated 29/12/71

* and ~~the *marginally noted re-~~ minders~~-~~ on the subject mentioned above and to state that your reply has not yet been received.

I am to request that reply thereto may kindly be expedited as the matter is extremely urgent/~~long pending~~.

Yours sincerely,

To:

Shri/~~The~~ K. Basavaa
CE. I Cauv
Sc.

mr/26970/-.

GOVERNMENT OF MYSORE

No. PWD 23 MKR 69.

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,
Dated, Bangalore, 21 Decr. 1971.

FROM

The *Secretary to the Government of Mysore*
Public Works and Electricity Department.

To

The Chief Engineer,
Irrigation (South),
Bangalore.

Sir,

Subject:- Kabini Project - Submersible area in Kerala State -

=====

While enclosing herein a copy of letter No.13117/IR5/70/WP/dated 8-12-1971 from the Government of Kerala, I am directed to state that this matter relating to the submersion of lands in Kerala State and the construction programme of Kabini Dam was discussed during the Major Irrigation Project Control Board meeting held on 21-12-1971. In as much as the Government of Kerala have firmly objected to any further correspondence or discussion relating to the question of surveying the submersible areas in Kerala State under the Kabini project, it is necessary that the height of the Kabini dam at present shall have to be so planned soas not to cause any submersion in Kerala State other than the normal submergence that would have occured owing to normal high floods prior to the taking up of the construction of the dam. It is necessary therefore that the flood gap required for the discharging of the maximum flood without affecting lands in Kerala state will have to be worked out in detail. As decided in the Major Irrigation Project Control Board meeting, I am directed to request you to study this matter in detail and furnish a note to Government. This subject may also be placed before the Technical Sub-Committee of the Major Irrigation Project Control Board and its recommendations forwarded early.

Yours faithfully,

ISSUE
dated 29/12

(S.K. Mohan),
Under Secretary to Government,
Public Works and Electricity Department.

mr/-

Copy of letter No.13117/IR5/70/W&P dated 8-12-1971, from the Secretary to Government of Kerala Trivandrum, addressed to the Secretary to Government of Mysore, P.W.D.Bangalore.

Sub:- Irrigation Kabini Dam project - Submergence of Kerala territory - Discontinuance of the Joint Survey of the submergible areas.

Ref:- 1. Your No.PWD 21 MKR-61 dated 22-12-1964.
2. This Govt's letter No.49827/CCi/64-PW dated, 25-11-1964.
3. Your No.PWD 21 MKR 61 dt. 15/22-12-1964
4. Your D O. No.PWD 23 MKR 69 dated 20-7-1971.

====

I am directed to invite your attention to the correspondence cited above and remind you of the fact that the preliminary Survey of submergible area in Kerala territory (due to the IInd stage of your Kabini Dam Project) jointly done by the Kerala and Mysore engineers had to be stopped on account of the unhelpful attitude of the Government of Mysore, although the survey was not completed. For the past one year, no work in connection with that survey had been done inside Kerala territory and the Kerala staff engaged in the Survey were diverted to other works.

2. It may be recalled that the Government of Mysore had assured this Government that no land in Kerala would get submerged under stage 1 of the Kabini Project. It was also assured by the Mysore Government that in case the Mysore Government proposed to impound water necessitating submersion of lands in Kerala State, necessary permission would be taken from this Government. And when the Mysore Government sought the Kerala Government's permission for making a detailed survey of Kerala territorylikely to be submerged, this Government requested the Mysore Government to forward the detailed project report on their Kabini Dam in order to enable this Government to study the implications of the Project. This has not been complied with so far, despite repeated requests. As the Mysore Government was found to be going ahead with the Project and as this Government was anxious to ascertain the magnitude of the possible submersion, this Government allowed a preliminary Survey jointly by the Kerala and Mysore Engineers on Kerala territory, on the basis of the information contained in a book-let on the Kabini Dam which was forwarded to this Government by the Mysore Govt.

3. I am directed to make it clear that this preliminary survey should not be confused with a detailed joint survey on the basis of which alone this Government could decide whether submersion could be permitted in Kerala territory.

.....2

4. Even this preliminary survey could not be completed as the Mysore Government did not care to furnish correct information regarding back water curve of the water-spread and other necessary data. This Government felt that no useful purpose would be served in continuing the survey jointly done by the Kerala and Mysore Engineers.

5. In view of the above facts, it is surprising to see your letter 3rd cited, stating that "the joint surveys of the area coming under submerison in Kerala on account of the Kabini Reservoir have been completed." I am directed to state that the above said statement is contrary to facts.

6. It may also be mentioned in this connection that this Government reacted favourably to the idea of conducting survey jointly in Kerala territory because it was hoped that the question of allocation and utilisation of Cauvery Waters by three riparian States of Kerala, Mysore and Tamil Nadu would be settled amicably through negotiation and discussions sponsored by the Government of India. But all meetings and discussions held subsequently proved futile and the Mysore Government went ahead with the project without caring for the objections of the other affected riparian states. It has become clear now that the Cauvery water dispute cannot be settled otherwise than by the decision of a tribunal under the Inter-State Water Dispute Act.

7. In these circumstances this Government is of the view that it is unnecessary to correspond any further in regard to this question of surveying submergible area in Kerala territory.

=====

No.PWD 23 MKR 69

To

The Chief Engineer,
Irrigation(South)
Bangalore.

Sir,

Sub: Kabini Project - Submersible area in Kerala State -

While enclosing herein a copy of letter No. 13117/IR5/70 WP/dated 8-12-1971 from the Government of Kerala, I am directed to state that this matter relating to the submersion of lands in Kerala State and the construction pgogramme of Kabini Dam was discussed during the MIPC Board meeting held on 21-12-1971. In as much as the Government of Kerala have firmly objected to any further correspondance or discussion relating to the question of surveying the submersible areas in Kerala State under the Kabini project, it is necesaary that the height of the Kabini dam ~~will have to be built~~ that at present shall have to be so planned so as not to cause any submersion in Kerala State other than the normal submergence that would have occured ~~happened~~ owing to normal ~~maxgx~~ high floods prior to the taking up of the construction of the dam. It is necessary therefore that the flood ~~gates~~ duty required for the discharging of the maximum flood without affecting lands in Kerala state will nave to be worked out ~~examined~~ in detail. As decided in the MIPC Board meeting, I am directed to request you to study this matter in detail and furnish a note to Government. This subject may also be placed before the Technical Sub Committee of the MIPC Board and its recommendations forwarded early.

Yours faitnfully,

US. PWD (Tech)

S.M.3/35/70.Sectt 37

90

GOVERNMENT OF KERALA

No.13117/IR5/70/W&P.

WATER AND POWER DEPARTMENT
(Irrigation)
Trivandrum, Dated, 8-12-1971.

From

The Secretary to Government of Kerala,
Water and Power Department,
T r i v a n d r u m.

To

The Secretary to Government of Mysore,
Public Works Department,
B A N G A L O R E.

5838

Sir,

Sub: Irrigation - M Kabbini Dam project - Submergence of Kerala territory - Discontinuance of the Joint Survey of the Submergible areas.

Ref: 1. Your No. PW. D. 21 MKR-61 dated 22-12-1964.
2. This Govt's letter No. 49827/CCi/64-6 PW dated, 25-11-1964.
3. Your No. PWD 21 MKR 61 Dtd. 15/22 th December 1964.
4. Your D.O. No. PWD. 23 MKR 69 dated 20.7.1971. — Vide page 82 ante

. . .

I am directed to invite your attention to the correspondence cited above and remind you of the fact that the preliminary Survey of submergible area in Kerala territory (due to the IInd stage of your Kabbini Dam Project) jointly done by the Kerala and Mysore engineers had to be stopped on account of the un-helpful attitude of the Government of Mysore, although the survey was not completed. For the past one year, no work in connection with that survey had been done inside Kerala territory and the Kerala staff engaged in the Survey were diverted to other works.

2. It may be recalled that the Government of Mysore had assured this Government that no land in Kerala would get submerged under stage I of the Kabbini Project. It was also assured by the Mysore Government that in case the Mysore Government proposed to impound water necessitating submersion of lands in Kerala State, necessary permission would be

(cont....d-2)

taken from this Government. And when the Mysore Government sought the Kerala Government's permission for making a detailed survey of Kerala territory likely to be submerged, this Government requested the Mysore Government to forward the detailed project report on their Kabbini Dam in order to enable this Government to study the implications of the Project. This has not been complied with so far, despite repeated requests. As the Mysore Government was found to be going ahead with the project and as this Government was anxious to ascertain the magnitude of the possible submersion, this Government allowed a preliminary Survey jointly by the Kerala and Mysore Engineers on Kerala territory, on the basis of the information contained in a book-let on the Kabbini Dam which was forwarded to this Government by the Mysore Government.

3. I am directed to make it clear that this preliminary survey should not be confused with a detailed joint survey on the basis of which alone this Government could decide whether submersion could be permitted in Kerala territory.

4. Even this preliminary survey could not be completed as the Mysore Government did not care to furnish correct information regarding back water curve or the water-spread and other necessary data. This Government felt that no useful purpose would be served in continuing the survey jointly done by the Kerala and Mysore engineers.

5. In view of the above facts, it is surprising to see your letter 3rd cited, stating that "the joint surveys of the area coming under submersion in Kerala on account of the Kabbini Reservoir have been completed." I am directed to state that the above said statement is contrary to facts.

6. It may also be mentioned in this connection that this Government reacted favourably to the idea of conducting survey jointly in Kerala territory because it was hoped that the question

(cont....d-3)

of allocation and utilisation of Cauvery Waters by three riparian States of Kerala, Mysore and Tamil Nadu would be settled amicably through negotiation and discussions sponsored by the Government of India. But all meetings and discussions held subsequently proved futile and the Mysore Government went ahead with the project without caring for the objections of the other affected riparian states. It has become clear now that the Cauvery Water dispute cannot be settled otherwise than by the decision of a tribunal under the Inter-State Water Dispute Act.

7. In these circumstances this Government is of the view that it is unnecessary to correspond any further in regard to this question of surveying submergible area in Kerala territory.

Yours faithfully,

(K. RAMUNNI MENON)
SECRETARY TO GOVERNMENT OF KERALA

taken from this Government. And when the Mysore Government sought the Kerala Government's permission for making a detailed survey of Kerala territory likely to be submerged, this Government requested the Mysore Government to forward the detailed project report on their Kabbini Dam in order to enable this Government to study the implications of the Project. This has not been complied with so far, despite repeated requests. As the Mysore Government was found to be going ahead with the project and as this Government was anxious to ascertain the magnitude of the possible submersion, this Government allowed a preliminary Survey jointly by the Kerala and Mysore Engineers on Kerala territory, on the basis of the information contained in a book-let on the Kabbini Dam which was forwarded to this Government by the Mysore Government.

3. I am directed to make it clear that this preliminary survey should not be confused with a detailed joint survey on the basis of which alone this Government could decide whether submersion could be permitted in Kerala territory.

4. Even this preliminary survey could not be completed as the Mysore Government did not care to furnish correct information regarding back water curve of the water-spread and other necessary data. This Government felt that no useful purpose would be served in continuing the survey jointly done by the Kerala and Mysore engineers.

5. In view of the above facts, it is surprising to see your letter 3rd cited, stating that "the joint surveys of the area coming under submersion in Kerala on account of the Kabbini Reservoir have been completed." I am directed to state that the above said statement is contrary to facts.

6. It may also be mentioned in this connection that this Government reacted favourably to the idea of conducting survey jointly in Kerala territory because it was hoped that the question

(cont....d-3)

No. IWD 23 KKR 69

To

The Secretary to Govt. of Kerala,
Water and Power Dept.
(General & Planning)
Trivandrum.

Sir,

Sub:- As at page 84 cf.

p. 84 cf. | In Continuation of this Dept. letter of even no. dated 23/8/71 on the above subject, I am directed to state that it has been proposed to examine the numbers, buildings & properties lands that may come under Submersion in the State of Kerala due to filling up of Kabini Reservoir. It is proposed to conduct Aerial Survey in this connection. I am therefore to request you to kindly obtain the necessary permission of Kerala Govt. for the purpose.

staff to Conduct the Survey in
Kerala area to enable to assess the
extent of property that comes under Submersion
of Kabini Reservoir.

Yours faithfully,

Dy. Secy PWD.

GOVERNMENT OF MYSORE.

Office of the Chief Engineer,
Irrigation (South), Bangalore.

No.DR/TAD2/KRP.40/71-72./5879-80. Dated: 8.12.71.

To

The Secretary to Government,
Public Works & Elecy.Department,
Vidhana Soudha,
Bangalore.

5770

48962

Sir,

Sub: Joint Surveys of submersible area in Kerala State under Kabini Project.

Ref: 1)Govt. letter No.PWD.23 MKR.69 dt.10-6-70.
2)This office letter No.DR/TAD2/KRP.40/4676-78 dated 2-11-70.

During the discussion with the Secretary and the Additional Secretary, Public Works Department on 6-12-1971, it was suggested to examine further whether buildings or properties in Kerala State come under submersion due to filling up of the Kabini Reservoir. The Superintending Engineer Kabini Project Circle, has been accordingly instructed to take necessary cross sections across the river at important structures in Kerala State, likely to come under submersion under afflux levels. In this connection as the departmental staff has to conduct surveys in Kerala area, permission of Kerala Government will be necessary. As such it is requested that Kerala Government may kindly be addressed to accord necessary permission to the staff of this State to conduct the surveys.

Yours faithfully,

For Chief Engineer,
Irrigation (South).

S.M. 3/77/69 Sectt. 37.

9 S

GOVERNMENT OF KERALA

WATER & POWER(IRRIGATION)DEPARTMENT.

No.10876/IR5/71/W&P dated: Trivandrum, 18 -8-1971.

From

THE SECRETARY TO GOVERNMENT.

To

The Secretary to the Government of Mysore,
Public Works and Electricity Department,
Mysore Government Secretariat,
Post Bag No.346, Bangalore-1

4005
A.I. DISTRICT
33727
25 AUG 1971

Sir,

Sub:- Kabini Project- submergible area in Kerala State.

Ref:- Your D.O.No.PWD -23-MKR 69 dated 20-7-1971.

I am directed to invite your attention to the letter cited. This Government have repeatedly requested for the details of the Mysore Kabini Project. These have not been furnished. I am therefore to inform you that the discussion as proposed by you may be held; but it is not likely to be useful in the absence of and until this Government examine the details of the Project.

Yours faithfully

G. Sukumaran Nair
Deputy Secretary
FOR SECRETARY TO GOVERNMENT.

Major I Lubin
P.P. upcast
21/8/71

Sri RN
25/8/71

GOVERNMENT OF MYSORE

No. PWD 23 MKR 69

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,
Dated, Bangalore, 19th August 1971.

FROM

The *Secretary to the Government of Mysore*
Public Works and Electricity Department

To

The Secretary to Government of Kerala,
Water and Power Department,
(Genenal & Planning)
Trivandrum.

Sir,

Subject: Kabini Project-Submersible area in Kerala State.

...

I am directed to invite reference to this department DO letter of even No. dated 20-7-1971 on the above subject and to request you to kindly furnish the convenient date for discussion asked for therein.

Yours faithfully,

19/8/71

(M. C h a n n a p p a)
Deputy Secretary to Government,
Public Works and Elecy.,Deptt.

19/8

Issued
Dated 23/8

19-8-71

PWD 23 MKR69.

To
The Secretary to Govt. of Kerala,
Water and Power Department,
(General & planning),
Trivandrum.

Sir,

Sub:- As at page 82 CF.

I am directed to invite ref. to this Depts; D.O letter of even No. dated 20-7-1971 on the above subject and to request you to kindly furnish the convenient date for discussion asked for therein.

Yours faithfully,
17/8/71
M/S to Govt. PWD & Ecd.
6/8.

82

D.O.No.PWD.23.MKR.69.

20.7.71.

Dear Sri ~~Viswanath Iyer~~ Viswanathan Nair,

Sub: Kabini Project - submersible area in Kerala State.

-:-

As you are aware joint surveys of the area coming under submersion in Kerala State with the construction of the Kabini Reservoir in our State have been completed. Before any water is stored under Kabini Dam it will be necessary for the Government of Kerala to acquire these lands and ~~for which~~ the Governments of Mysore and Kerala will have to agree on the procedure of the acquisition. To enable a clear and complete understanding of the matter, I propose to go over to Trivandrum some time ~~early~~ during early next month along with our Addl.Secretary, P.W.D. & Engineer-in-chief, Sri Iftekhar Ahmed and discuss this issue. May I request you to kindly indicate a date and time that will be suitable to you for such a ~~minute~~ discussion?

With best regards,

Yours sincerely,

(Sd/-) 19.7

Sri K.P. Viswanathan Nair
~~Sri Viswanath Iyer,~~
Secretary to Government, of Kerala,
Water & Power Department
(General & Planning),
Trivandrum.

Date 20.7.71

81

GOVERNMENT OF MYSORE

No. PWD 23 MKR 69.

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,
Dated, Bangalore,.....26.....June....1971.

FROM

Secretary to the Government of Mysore
Public Works and Electricity Department.

To

The Chief Engineer,
Irrigation Project, South,
Bangalore.

Sir,

Sub: Joint Surveys of submersible area in Kerala State under Kabini Project.

===

I am directed to invite urgent reference to Government letter of even number dated 6-1-1970 on the subject mentioned above and to state that your reply has not yet been received.

I am to request you kindly send reply early as the matter is long pending.

Yours faithfully,

Sd/-.
Section Officer,
Public Works & Elecy., Department

mr/

Copy to: The Director, Water Resources Development Organisation, Ananda Rao Circle, Bangalore for kind information.

24/6/71
Section Officer,
Public Works & Elecy., Department.

ate 28/6/71

24/6

GOVERNMENT OF MYSORE

Deputy/Under Secretary to Government,
Public Works & Elecy., Department.

MYSORE GOVERNMENT SECRETARIAT,
"Vidhana Soudha",
Bangalore, dated the - 6 - 71.

~~P.W.~~NO.PWD 23 MKR 69.

To
~~Dear Sir,~~ The C.E. I.P. South
Bangalore.
Sir,

Subject:- As at para 79 of.

***

I am ~~desired~~ directed to invite urgent reference to Government letter/memo of even number dated 6-1-70

* and ~~the *marginally noted re-~~ minders on the subject mentioned above and to state that your reply has not yet been received.

You kindly send reply early

I am to request ~~that reply thereto may kindly be expedited~~ as the matter is ~~extremely urgent~~/long pending.

Yours sincerely,

28/6/71

S.O. PWD (Eal.

22/6

To:

~~Shri/The~~

Copy to the Director of Water Resources Development organisation, Ananda Rao circle, Bangalore. for information

mr/26970/-.

GOVERNMENT OF MYSORE

No. PWD 23 MKR 69.

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore,.....Jan 197 1.

FROM

The *Secretary to the Government of Mysore*
Public Works and Elecy. Department,
Bangalore.

To

The Chief Engineer,
Irrigation Project(South),
Bangalore.

Sir,

Subject:- Joint Surveys of submersible area in Kerala State under Kabini Project.

R e f:- Your D.O.letter No.DR/TAD2/KRP/ 40-70-71/3476 dated 18-12-1970.

****

With reference to the communication cited above, I am directed to state that the matter regarding Joint Surveys of Submersible area in Kerala State Under Kabini Project etc., may be placed before the experts Committee on Cauvery Project for further examination of the matter and their views forwarded early.

Yours faithfully,

Sd/-

(S.K.MOHAN)
Under Secretary to Government,
Public Works and Elecy. Department.

RRc/5.

Copy of the above forwarded to the Director of Water Resources Development Organisation, Ananda Rao Circle, Bangalore, Bangalore for information.

Under Secretary to Government,
Public Works and Elecy. Department.

Issued
Date 6/1/70

To

The Chief Engineer TP (South)
Bangalore

Sir,

Subject:- Joint Surveys of Submersible area of in kerala State under kabini Project-

Reference your Do letter No DR/ TAD2/KRP/400-70-71/3476 dated 18th-12-70.

With reference to the cited Communication above I am directed to state that the matter regarding joint-Surveys of Submersible area in kerala state under kabini project-etc, may

be placed ~~of~~ before the Experts Committee on ~~Cod Corp~~ Cauvery project for further consideration of the matter and their views forwarded early.

Yours faithfully

Sd/-

under Sec'y

Copy of the above forwarded to the Director of Water Resources Development - Organisation, Ananda Rao Circle Bangalore / Bangalore for information with ~~a request to Please the Subject before the Experts Committee~~

Sd/-

U/S to Govt

Govt

6/1/71

77

K.BASANNA, B.E., M.I.E.,
CHIEF ENGINEER
IRRIGATION (SOUTH).

No.63, Palace Road,
BANGALORE 1B.

Dated 18th-12-1970

D.O.No.DR.TAD2/KRP/40/70-71./ 5476

My Dear Shri S. Varadan,

Sub: Joint surveys of submersible area in Kerala State under Kabini Project.

DS/9

A statement showing the back water levels due to the construction of the Kabini Reservoir Project has been forwarded to Government in this office letter No.DR.TA.D2. K.RP.40/4676-78 dated 2-11-70. The back water contour has to be traced on the ground jointly by the staff of the Government of Mysore and Kerala. The Survey Sub Division for the above work is sanctioned upto March 1971. As such it is necessary to complete the work in this season only.

It is felt that concurrence of Government of Kerala is also required for the proposed levels.

I therefore request you to communicate the approval of Government for the proposed back water levels, so that the work could be taken up immediately.

Yours Sincerely,

(K.BASANNA) 17-12-70

To

Shri S.Varadan, I.A.S.,
Secretary to Government,
P.W. & Elecy.Department,
BANGALORE-1.

736/GD 22-12-70.

To

The Secretary to Government of Kerala
Irrigation Department,
TRIVANDRUM.

Sir,

Sub: Kabini Reservior Project- joint surveys of the submercible area -

The Chief Engineer of this State has indicated that the joint survey of the submercible area under Kabini Project in ~~Kabini Project~~ in Kerala State have been finalised and the levels upto which lands have to be acquired at various points have also been ~~settled~~ finalised. In order to determine the exact ~~areas~~ lands of ~~Lands~~ that will come under submersion as well as the properties that will be affected by this submersion, it will be necessary to demarcate, the levels as now arrived at from the joint survey on the ground. Such de-marcation can be done only with the assistance ~~of the officers and officials~~ of the Government of Kerala in the Revenue Department.

I am therefore directed to request you to kindly convey your concurrence to the above proposal for joint demarcation of the submercible area, under Kabini project in Kerala state for taking further action in the matter.

Yours faithfully,

(S. K. Mohan)
J.S. P.W.D.(Tec)

Copy to 1) C. E (South), Bangalore; for information.
2) Divisional Commissioner, Mysore. for information

not issued

75

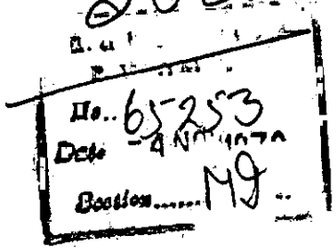
Office of the Chief Engineer, PWD.,
Irrigation (South),
63, Palace Road, Bangalore-1B.

DR.
No: TAD2/KRP.40/4676-78. Dated: 2-11-70.

To

The Secretary to Government of Mysore,
Public Works & Electricity Department,
Vidhana Soudha, Bangalore-1.

5082



Sir,

Sub:- Joint surveys of submersible area in Kerala State under Kabini Project.

Ref:- Govt. letter No. PWD 23 MKR 69 Dated: 25th March, 1970 and 10th June, 1970.

1. Some area lying in Kerala State gets submerged due to the construction of the storage dam across Kabini River at Bidarahally - Beechanahalli site, H.D.Kote Taluka, Mysore District. Joint Surveys by the PWD Staff of Mysore and Kerala Governments were conducted to assess the extent of submersion due to the back water effect. A brief note explaining the procedure followed with details is enclosed for reference along with a statement indicating the probable water levels at the different cross sections, and proposed levels for acquisition.

2. The back water profile is computed considering 39 cross sections commencing from the dam site at Ch. 0 to Ch. 5 miles 3 flg. 275' at the 29th cross section from Kudal. The maximum flood discharge considered in the project report, at the dam site is 1,94,000 cusecs. But the Spillway is capable of discharging 1,54,600 cusecs. The balance discharge will get absorbed in the reservoir and the level will rise by 2' in 10 hours. As such the M.W.L. i.e., 2286.00 is considered in the back water computation.

3. The computed back water profile holds good for the present condition at which levels have been taken along the cross section. After building up of the reservoir the ground levels get changed due to silting up of Reservoir. As such some margin is left out for accounting these variations.

4. In the upper reaches the difference between the water profile and M.W.L. is appreciable. This is mainly due to higher bed levels. Major portion of the submergence will be due to high flood and the remaining portion due to the back water effect. Therefore it is reasonable to consider the strip between flood contour and back water level at the respective cross sections for land acquisition purposes.

5. As this is an inter state matter, it is felt that concurrence of the Government of Kerala may also be necessary for finalising the levels. The work of marking the back water contour on the ground is to be started early. I, therefore, request you to obtain and communicate the approval of the Government for the above proposed levels.

6. The approximate area coming under the calculated back water levels and lying within Kerala State limits have been found out by planimeter. This area also includes the

..P/2.

the river bed widths. However the exact areas including the details of survey numbers etc. can only be obtained and finalised by the Revenue officials of both the States. The back water levels on ground, however will be fixed by the Public Works Department jointly.

7. I, therefore, request you kindly to refer the matter to the Revenue Department of Mysore State, both for finalising the acerage as well as the valuation of structures coming in this area and to pursue the matter further.

8. An early action is requested.

Yours faithfully,

for Chief Engineer, PWD.,
Irrigation (South)
2/11/20

O.C. Appd. by C.E.
2/11

Encl:-

1) One statement.
2) One Note.
3) Index Map.

A NOTE ON THE CALCULATION OF BACK WATER LEVELS IN KABINI RESERVOIR UNDER KABINI RESERVOIR PROJECT.

I. BRIEF DESCRIPTION:

The Kabini Reservoir Project as administratively approved by the Government of Mysore vide No. PWD 27 MKP 62 dated: 13.2.1970 for Rs. 24.80 ~~lakhs~~ crores contemplates the construction of a Reservoir across the River Kabini near Bidarahalli-Beechanahalli site to Store 19.2 T.Mcft. of water.

The catchment area of the river at the Dam Site is 827 Sq.Miles. The design flood at the Dam Site is about 1,94,000 Cusecs which is 60% above the observed flood discharge of 1,20,000 cusecs during the year 1924. The normal flood that can be expected in most of the years in the river Kabini is of the order of 60,000 cusecs.

The project contemplates irrigation of 1,26,000 acres of mixed crop apart from the power development of 32,000 K.W. and supply of 2.8 T.Mcft. of drinking water to Bangalore City.

The River Kabini rises in the Wynad Taluk of Kerala State at an altitude of 7000 ft. and flows through a distance of 132 miles before joining the river Cauvery at T.Narasipura. The river drains hilly and Forest catchments in its upper reaches where the rainfall varies from 70" to 125". The rainfall at the dam site is about 30" while the same is 20"-25" in its command area.

The River Kabini is formed by several large streams rising in the peaks of Western ghats. Prominent among them being (1) Panamaram Puzha (2) Karamathi Puzha and (3) Manantoddy Puzha. These streams after flowing for about 25 to 30 miles join together at about 5 miles above the Mysore-Kerala border. Another big stream known as Bavali stream joins the river at the Mysore-Kerala border. This combined river then forms the boundary between Mysore and Kerala State for a distance of 6 miles upto Kannegal Hole.

The bed level of the river at the Dam Site is R.L. 2204.00 average. The full Reservoir level is fixed at R.L. 2284.00. The maximum area of water spread is 23.4 sq. miles.

II. SUBMERSION DETAILS:-

The Kabini Reservoir has a live storage of 19.2 T.Mcft. the Gross Storage being 19.52 T.Mcft. The reservoir submerges a total area of 15,434 acres out of which the cultivable area of submergence is 8,904 acres and the balance area of 6530 acres consists of Forest land. It is anticipated that an area of 254 acres (Approx) of Cultivable area would get submerged in the Kerala State limits, due to the back water effect of the Reservoir. In order to arrive at the correct area required to be acquired from Kerala State for the purpose submergence in the reservoir due to the backwater effect, Government issued instructions to conduct joint surveys for the purpose.

III. WORK DONE SO FAR:-

Accordingly the work has been taken up by the staff of Sub-division called Kabini Investigation Sub-Division, located at Manantoddy formed by the Kerala Government and the other Sub-division called No.4. Joint Survey Sub-Divn. formed at Kabini colony by the Government of Mysore.

..P/2.

The work jointly done by these two sub-divisions are:

(i) Setting up of the base line on both the banks of the river in Kerala State limits i.e., from Kudal point to Kannegal Hole.

(ii) Taking cross sections of the River lying within Kerala State limits from Kudal point to Kannegal Hole.

Apart from the above work cross sections of the river from the Dam Site upto Mysore State Border namely Kannegal Hole has also been taken up by the staff of Mysore Government only as per the discussions with the Director, M.E.R.S. during February, 1970.

In all 34 River Cross sections have been taken from the dam site upto Kudal point. Out of these 34 cross sections 22 river cross sections are within Mysore State limits, viz. Kannegal Hole and the balance of 12 cross sections are in the Kerala State limits for which joint surveys have been conducted.

IV. CALCULATION OF BACK WATER LEVELS:-

designed flood of 1,94,000 cusecs.

The F.R.L. of the Reservoir submerges the area within the Mysore State and also extends in the Kerala State limits, within the banks of the river. This area of submergence extend into Kerala State limits when the river is discharging maximum flood, due to back water effect. As this varies from point to point it is necessary to calculate the back water levels due to the maximum discharge at all points of the reservoir and institute acquisition proceedings to acquire this area in Kerala State limits.

The F.R.L. of the reservoir is 2284.00. The maximum flood discharge considered in the project report at the dam site is 1,94,000 cusecs. The Spillway capacity at F.R.L. is 1,54,600 cusecs inclusive of the discharge through river sluices. The balance discharge gets absorbed in the reservoir and the flood routing computation indicate that the water level will rise by about 2 ft. in a period of 10 hours. Therefore the maximum water level i.e., 2286.00 is considered in the back water computation.

At the dam site the difference between F.R.L. and M.W.L. is 2 ft. This value is maximum at the dam site and goes on reducing at the upper reaches. The difference at the 29th cross section is not appreciable. However it is safe and reasonable to consider the M.W.L. instead of F.R.L.

The computation is done by standard step method assuming a value of 0.035 for rugosity co-efficient (N) in Manning's formula. The frictional gradient is calculated at each cross section adopting Manning's formula.

$$V = \frac{1.486}{N} r^{2/3} \times s^{\frac{1}{2}}$$

Where V is the velocity in ft/sec.

N = Co-efficient of rugosity, r = Hydraulic mean depth, s = slope.

The formula for s becomes $v^2 \frac{N^2}{(1.486)^2} \frac{1}{R^{4/3}}$

i.e., $s = \frac{v^2}{2g} \times 2g \times \frac{N^2}{(1.486)^2} \frac{1}{R^{4/3}}$

This simplifies to $s = 0.035726 \times \frac{1}{R^{4/3}} \left(\frac{V^2}{2g}\right)$

Loss of head due to friction is worked out between the reaches considering the average value of s.

In considering the discharge, due consideration is given to the discharges contributed by minor valleys based on proportionate catchment area. Due to this the maximum discharge reduces from 1,94,000 at the dam site to 1,45,910 cusecs at the 29th cross section.

Survey is conducted before building up of the reservoir. After the formation of reservoir the silt gets deposited right from the dam upto the 29th c. section and beyond. This diturbs the ground level. As such the cross sectional area, and perimeter considered in the computation gets changed resulting in variation in back water levels.

From the enclosed statement it is seen that the difference between back water level at 29th cross section and M.W.L. is of the order of 24.702 ft. This rise in water level is not due to the formation of reservoir alone, but mainly due to the high bed level. The deepest bed level at this section is 2280.90. As such the water level will rise for above 2286.00 due to high flood discharge. Therefore it is reasonable to consider the strip between the flood contour and back water level for land acquisition purposes.

The work of making the back water contour on ground will be taken up after the approval to the statement of levels enclosed.

B. Venkataramana 2/11/70

for Chief Engineer, PWD.,
Irrigation (South)

O.C. Appd. by C.E,

2/11/70

Kabini River Backwater Levels starting from 2286.00.

1. Cross Section No.	2. Chainage M. F. Ft.	3. R.L. of water surface M.W.L. at 2286.00	4. Proposed level for acquisition.	5. Remarks.
0	0- 0- 000	2286.00	2286.100	
1	1- 0- 055	2286.017	2286.100	
2	2- 0- 006	2286.035	2286.100	
3	3- 5- 190	2286.075	2286.100	
4	4- 6- 144	2286.100	2286.100	
5	6- 1- 210	2286.140	2286.250	
6	7- 6- 497	2286.176	2286.250	
7	9- 4-548	2286.218	2286.250	
8	11-2-642	2286.226	2286.250	
9	12-2-583	2286.240	2286.250	
10	13-1-337	2286.265	2286.500	
11	14-5-646	2286.331	2286.500	
12	15-4-396	2286.382	2286.500	
13	16-4-513	2286.497	2286.500	
14	17-7-535	2286.622	2286.750	
15	19-7-312	2286.888	2287.000	
16	21-0-550	2287.111	2287.250	
17	22-2-161	2287.487	2287.500	
18	23-7-424	2289.771	2290.000	
19	24-6-196	2291.000	2292.000	
20	26-3-587	2292.539	2293.000	
22	28-2-637	2296.044	2296.500	
23	11-3-190 (from Kudal)	2298.490	2299.000	
24	10-4-418	2299.960	2300.250	
25	9-4-094	2301.498	2302.000	
26	8-4-318	2303.799	2304.250	
27	7-4-212	2305.833	2306.25	
28	6-5-603	2307.203	2307.50	
29	5-3-275	2310.702	2311.000	

B/
20/10/70

PWD 22 MAR 69

To

The Chairman
CW & PC (Water Wing)
Govt of India
New Delhi

Sir,

Subject:— Malaprabha project — forwarding of plan etc

Reference your letter No 1/17/69/TE dated 5-1-70

With reference to the communication cited above I am directed to forward herewith a copy of plan showing clearly the ~~Command~~ Commanded area under Nargund Reservoir Halasur and Hullahalli Anicuts as desired.

Not issued

Yours faithfully

M/s

DW 3/8

67

Office of the
Chief Engineer, Irrigation South,
No. 63, Palace Road, Bangalore-1
Date 23-7-70

No.KRP/54/TAC/841

To

3178

The Secretary to the Government of Mysore
Public Works Department,
Vidhana Soudha,
Bangalore-1.

G. & I SECTION
Irrig. Dept.
No 38213
Dt: 21 JUL 1970
Encls M.E.

Sir,

Subject:-Memorandum submitted to the Honourable Minister for Home- Government of India by the Public of North and South Wynad Taluk of Kerala State.

Reference:- Government letter No.PWD 213 MI/70 dated 19-1-70.

- - - -

The Joint surveys of submergible area within Kerala State have just been completed, and the area actually coming under submergence are to be computed after the back water curve calculations are finalised.

A further report in the matter will be furnished to Government immediately after the area likely to be effected in Kerala State due to Kabini Reservoir is finalised jointly.

The representation in original received vide Government letter referred above is returned herewith as desired.

Yours faithfully,

For Chief Engineer,
Irrigation (South)

En:- Govt. letter referred above in original.

ch.

MEMORANDUM SUBMITTED TO THE HON'BLE MINISTER FOR IRRIGATION, GOVT. OF MYSORE, BANGALORE.

By

The Public of Pulpally Amsom, Kannapapuzha, Kolavalli, Marakkadav, Pakkam, Varayur, Perikkallur and Chegadi in South Wynad Taluk Kozhikode District & Tirunelly, Palvelicham, Kottankara, Koodal, Bavali, Thorambur, Kakkeri, Kavikkal of North Wynad Taluk Cannanore Dist.

Hon'ble Sir,

We, the public of the above amsoms beg to submit the following facts for your kind consideration and favourable disposal;

1. By this time it will be well known to you that the Kabini River Project is progressing. It is also known to you that this project is sponsored by the Government of Mysore with the assistance of the Government of India.

2) It is estimated that the work of the Project will be completed by 1972 and by the time a major portion of Pulpally amsom will be lost in water due to the construction of the dam. It is known that it is wrongly estimated that the lands that will be lost in water are mearely waste and without improvements. The estimate is fantastic and imaginery. In about 5000 acres nearly 300 families consisting of not less than 3000 persons are living. All these lands are well improved and about 3000 acres are fertile paddy lands besides coffee, pepper, rubber , lemon grass etc. It is submitted that these lands are improved at the risk of lives of so many. The inhabitants had to face wild animals, epidemic diseases before these lands are made into the present condition. Under the present social system, it is only normal to ignore such people and to report that these lands are waste without any improvements. There are 4 Government L.P.Schools, 3 Christian Churches, 3 Temples, 2 mosques and cultural institutions, whihhwill be effected by this water logging. Moreover there are innumerable buildings involving lakhs of rupees possible of perishing.

3) The poor people who have come up to the present position by hard work risking even their lives are now quit their own lands without any abode elsewhere. This consequence of the construction of Dam should not be ignored when compensation to them are decided.

4) It is apprehended that this Project cannot be given up since there may be inter State agr cments which cannot be violated. Therefore we are bringing to your notice the following facilities to be imporatively made to the poor lands holders at the place.

(Contd.....)

1) Such of the land owners who will be effected by flood due to the construction of the Dam should be given an equal amount of land with equal fertility elsewhere with sufficient cash and aid for the improvement of such lands and for the maintence of such lands and for the maintence of such land holders till their lands are improved.

ii) Wherever houses and buildings are effected sufficiently compensation should be given for the construction of such houses and buildings. The estimate of costs should be done with a practical outlook.

iii) For calculation of compensation existing improvements shouldbe taken into consideration. At least 2o times of the profits should be taken as basis wherever profits are available. In other cases the actual cost necessary for plantation should be calculated and given.

iv) In the area proposed to be shifted all the fabilities of education, Hospital, roads, Post Office, Police State should be provided and preference should be given for such improvements to such area.

V) There are cases where major portions of the lands in possession will be lost and in such cases the whole of the possession should be acquired by the Government and compensation should be dicided for the entire land. Otherwise, the land holders will be put into very hard difficulties and they will be in a position not to take care of themselves with the balance of land.

We are approaching you with this memorandum since the report of the officials are absolutely incorrect, prepared without any care or responsibility. The sufferings of the lands holders can be appreciated only by a person like you and not by the Arm Chair Officials. Further this project being under the Government of Mysore and the whole improvement is only for the benefit of that State they will be very much interested to push on with the work without much care to the sufferings of the population of this state. Kerala is losing the productivity of paddy especially when acute food crisis is in existence. The value of such paddy fields cannot be left to the only paper dealing officials to be estimated. They should be directed to have a real and practical attitude in the valuation. It is understood that the flat rate is allotted by the Mysore State for the land holders of Kerala which they are compensating their own lands owners on the basis of improvement value.

We submit that a very sincere attitude may be taken with regard to the land losers due to the Kabini Project. It is also submitted that you may be kind enough to take a personal interest at the time of reaching an agreement regarding compensation with the Mysore State.

Yours faithfully,

Mananthoddy,
1-1-1970.

Secretary,
K.R.P.Flood Relief Committee, Kartikulam.P.O,
N.Wynad, Cannanore Dist. Kerala.

P.T.O.

NO PWD. 213/MI/70
Dt- 19-1-70

Memo

Forwarded to the Chief Engineer, irrigation project (South) Bangalore for favour of retransmission with a report.

B. N. Subbaraya Setty
19/1/70
Section Officer
PWD (Maj. Sy.)

MS
19/1/70

JE
A
21/1

2311
27/1

Office of the Chief Engineer (General)
P.W.D., P.B. No. 40, Bangalore-1.

No. IPH/S.9/IGN/R/70-71
one map

64

To

The Secretary to Government,
Public Works Department,
Bangalore.

JUL 1970

Sir,

Sub: Kabini Project.

Ref: Govt. letter No. PWD. 4746 MI 69 dt. 25-4-1970.

With reference to the above, I am to forward herewith a plan showing clearly the command areas under Nugu Reservoir, Halasur and Hullahalli Anicuts.

Yours faithfully,

KRS.21.

for Chief Engineer (General).

3187

B. & I. SECTION
P. W. D. Dept.
No 38225
Date 24 NOV 1970
Sect. M-I

24/7

Submitted

28/7/70

Wr 1/8/70

The file on this subject has been submitted to Secy PWD on 27.7-20. Return of the file may be awaited

Wr 28/7/20

24/7 Bissary 28/7

63

23 MKR 69.

29 July 0

The

Public Works & Elecy. Department.,
Bangalore.

The Chief Engineer,
Irrigation (South),
Bangalore.

Sir,

Subject: Kabini River Project.

I am directed to forward herewith letter No.7(4)70-DW.II, dated 18th July, 1970, along with its enclosures received from Ministry of Irrigation and Power, Government of India, on the above subject and to request you to kindly furnish your comments in the matter along with an Index map showing the location of the areas.

Yours faithfully,

(S.K.Mohan)
Under Secretary to Government,
Public Works & Elecy. Departt.

ISSUED
Dated 27/7

RRc/

No.7(4)/70-DW.II.

Government of India
Ministry of Irrigation and Power.

****

New Delhi, the 18 July, 1970.

To

The Secretary to the Govt. of Mysore,
Public Works and Electricity Departt.,
Bangalore.

Subject: Kabini river Project.

Sir,

I am directed to refer to Shri N.C.Saxena, Joint Secretary's D.O. of even number dated the 24th March, 1970 (Copy enclosed) on the subject mentioned above and to request that the State Govts. comments in the matter and also an Index map showing the location of the areas may kindly be supplied to this Ministry at an early date for the information of Union Minister for Irrigation and Power.

Yours faithfully,

Sd/-
(P.R.BOSE)
UNDER SECRETARY TO THE GOVERNMENT OF INDIA.

/ C o p y /

RRc/

N.C.Saksena,
Joint Secretary,

D.O.No.DW.II-7(4)/70 24th March, 1970.

Dear Shri

I am enclosing a copy of Memorandum submitted to the Union Minister for Home Affairs, by the Public of Thirumelly, Bavali to Kondal of North Wynaad, Cannanore District and Pulpally to Koodal of South Wynaad, Kozhikode District, Kerala State, regarding the Kabini River Project. I shall be grateful if the State Government's comments in the matter as also an Index map showing the location of the areas mentioned in the Memorandum, could kindly be supplied at an early date.

With kind regards,

Yours sincerely,

Sd/-
(N.C.Saksena)

Shri Chandappa Patel,
Secretary to the Govt. of Mysore,
Public Works & Elecy. Department,
Bangalore.

Encl. as above.

/ C o p y /

RRc/

MEMORANDUM SUBMITTED TO THE HON'BLE MINISTER FOR HOME, GOVERNMENT OF INDIA, NEW DELHI.

By

The Public of Thirunelly, Bavali to Koodal of North Wynaad, Connanere District and Pulally to Koodal of South Wynaad, Kozhikode District Kerala State.

Hon'ble Sir,

We, the public of Thirunelly, Bavali to Koodal of North Wynaad Taluk Cannanore District and Pulpally to Koodal of South Wynaad Taluk, Kozhikode District - Kerala State beg to submit the following facts for your kind considerption and favourable orders

(1) By this time it will be well know to you that the Kabini River Project is progressin . It is also knwon to you that this project is sponsored by the Covernment of Mysore with the Assistance of the Covernment of India.

(2) It is estimated that the work of the Project will be completed by 1972 and by the time a major portion of Pulpally Amsom will be lost in water due to the construction of the dam. It is known that it is wrongly estimated that the lands that will be lost in water are merely waste and without improvements. The estimate is fantastic and imaginery. In about 5000 acres nearly 3000 families consisting of not less than 3000 persons are living. All these lands are well improved and about 3000 acres are fertile paddy lands besides coffee, pepper, rubber, lemon grass etc. It is submitted that these lands are well improved ~~xxxxxxxxxxxxx~~ at the risk of lives of so many. The inhabitants had to face wild animals, epidemic diseases before these lands are made into the present condition. Under the present social system, it is only normal to ignore such people and to report that these lands are waste without any improvements. There are 4 Government L.P.Schoo s, 3 Christian Churches, 3 Temples, 2 Mosques and cultural Institutions, which will be effected by this water logging. Morevoer there are innumerable building involving lakhs of rupees possible of perishing.

(3) The poor people who have come up to the present position by hard work risking even their lives are now to quit their own lands without any abode elsewhere. This consequence of the construction of Dam should not be ignored when compensation to them are decided.

(4) It is apprehended that this project cannot be given up since there may be inter state agreements which cannot be violated. Therefore we are bring to your notice the following facilities to be imperatively made to the poor lands holders at the place.

.....2/-

(i) Such of the land owners who will be affected by flood due to the construction of the Dam should be given on equal amount of land with equal fertility elsewhere with sufficient cash and aid for the improvement of such lands and for the maintenance of such lands holders till their lands are improved.

(ii) Where houses and buildings are effected sufficient compensation should be given for the construction of such houses and buildin s. The estimate of costs should be done with a practical outlook.

(iii) For calculation of compensation existing improvements should be taken into consideration. Atleast 20 times of the profits should be taken as bsis wherever profits are available. In other case the actual cost necessary for plantation should be calculated and given.

(iv) In the area proposed to be shifted all the facilities of education, Hospital, Roads, Post Office, Police Station should be provided and preference should be given for such improvements to such area.

(v) There are cases where major portions of the lands in possession will be lost and in such cases the whole of the possession should be acquired by the Government and compensation should be decided for the entire land. Otherwise, the land holders will be put into very hard difficulties and they will be in a position not to take care of themselves with the balance of land.

We are approaching you with this memorandum since the report of the officials are absolutely incorrect, prepared without any care or responsibility. The sufferings of the lands holders can be appreciated only by a person like you and not by the Arm Chair Officials. Further this Project being under the Government of Mysore and whole improvement is only for the benefit of that State they will be very much interested to push on with the work without much care to the sufferings of the popuaation of this State. Kerala is losing the productiyi ty of paddy, especially when acute food crisis is in existence. The value of such paddy fields cannot be left to the only paper dealing officials to be estimated. They should be directed to have a real and practical attitude in the valuation. It is understood that the flat rate is allowed by the Mysore State for the land holders of Kerala when they are compensating their own land onwers on the basis of improvement value.

We submit that a very sincere attitude may be taken with regard to the land losers due to the Kabini Project. It is also submitted that you may be kind enought to take a personal interest at the time of reaching an agreement regarding compensation with the Mysore State.

Yours faithfully,

Sd/-
Secretray,
K.R.P.FLood Relief Committee,Kartikulam P.O.North Wynaad.

RRc/

No.7(4)/70-DW.II.
Government of India
Ministry of Irrigation and Power
***
New Delhi, the 18 July, 1970.

To

The Secretary to the Govt. of Mysore,
Public Works and Electy. Department,
Bangalore.

Subject: Kabini river Project.

-.-.-

Sir,

I am directed to refer to Shri N.C.Saxena, Joint Secretary's D.O. of even number dated the 24th March, 1970 (Copy enclosed) on the subject mentioned above and to request that the State Govt's. comments in the matter and also an Index map showing the location of the areas may kindly be supplied to this Ministry at an early date for the information of Union Minister for Irrigation and Power.

3121

SECTION
Dy. No. 37536
Dated 21.7.70

Yours faithfully,

(P.R.BOSE)
UNDER SECRETARY TO THE GOVERNMENT OF INDIA

Yadav/16.7

21/7/70

To

The CEI (South) Bangalore.

Sir

Subject: Lab in ...

Ref: ... NC 1'4, 70-DW.

Pages 56 to 59

...

...

...

N.C. Saksena,
Joint Secretary

D.O.No.DW.III-7(4)/70 24th March, 1970.

Dear Shri

I am enclosing a copy of Memorandum submitted to the Union Minister for Home Affairs, by the Public of Thirumelly, Bavali to Kondal of ~~Kozhikode~~ North Wynaad, Cannanore District and Pulpally to Koodal of South Wynaad, Kozhikode District, Kerala State, regarding the Kabini River Project. I shall be grateful if the State Government's comments in the matter as also an Index map showing the location of the areas mentioned in the Memorandum, could kindly be supplied at an early date.

With kind regards,

Yours sincerely,

sd/-

(N.C. Saksena)

Shri Chandappa Patel,
Secretary to the Govt. of Mysore,
Public Works & Electricity Dept.,
Bangalore.

Encl: as above.

(i) Such of the land owners who will be affected by flood due to the construction of the Dam should be given an equal amount of land with equal fertility elsewhere with sufficient cash and aid for the improvement of such lands and for the maintenance of such lands holders till their lands are improved.

(ii) Wherever houses and buildings are effected sufficient compensation should be given for the construction of such houses and buildings. The estimate of costs should be dome with a practical outlook.

(iii) For calculation of compensation existing improvments should be taken into consideration. Atleast 20 times of the profits should be taken as basis wherever profits are available. In other case the actual cost necessary for plantation should be calculated and given.

(iv) In the area proposed to be shifted all the facilities of education, Hospital, Roads, Post Office, Police Station should be provided and preference should be given for such improvements to such area.

(v) There are cases where major portions of the lands in possession will be lost and in such cases the whole of the possession should be acquired by the Government and compensation should be decided for the entire land. Otherwise, the land holders will be put into very hard difficulties and they will be in a position not to take care of themselves with the balance of land.

We are approaching you with this memorandum since the report of the officials are absolutely incorrect, prepared without any care or responsibility. The sufferings of the lands holders can be appreciated only by a person like you and not by the Arm Chair Officials. Further this Project being under the Government of Mysore and whole improvement is only for the benefit of that State they will be very much interested to push on with the work without much care to the sufferings of the population of this State. Kerala is losing the productivity of paddy especially when acute food crisis is in existence. The value of such paddy fields cannot be left to the only paper dealing officials to be estimated. They should be directed to have a real and practical attitude in the valuation. It is understood that the flat rate is allowed by the Mysore State for the land holders of Kerala when they are compensating their own land owners on the basis of improvement value.

We ~~xxx~~ submit that a very sincere attitude may be taken with regard to the land losers due to the Kabini Project. It is also submitted that you may be kind enough to take a personal interest at the time of reaching an agreement regarding compensation with the Mysore State.

Yours faithfully,

Sd/-
Secretary,
K.R.P. Flood Relief Committee, Kartikulam P.O. North Wynaad,

MEMORANDUM SUBMITTED TO THE HON'BLE MINISTER FOR HOME, GOVERNMENT OF INDIA, NEW DELHI

By

The Public of Thirunelly, Bavali to Koodal of North Wynaad, Cannanore District and Pulally to Koodal of South Wanadd, Kozhikode District Kerala State

Hon'ble Sir,

We, the public of Thirunelly, Bavali to Koodal of North Wynaad Taluk Cannanpre District and Pulpally to Koodal of South Wynaad Taluk, Kozhikode District - Kerala State beg to submit the following facts for your kind consideration and favourable orders:-

(1) By this time it will be well known to you that the Kabini River Project is progressing. It is also known to you that this project is sponsored by the Government of Mysore with the Assistance of the Government of India.

(2) It is estimated that the work of the Project will be completed by 1972 and by the time a major portion of Pulpally Amsom will be lost in water due to the construction of the dam. It is known that it is wrongly estimated that the lands that will be lost in water are merely waste and without improvements. The estimate is fantastic and imaginery. In about 5000 acres nearly 3000 families consisting of not less than 3000 persons are living. All these lands are well improved and about 3000 acres are fertile paddy lands besides coffee, pepper, rubber, lemon grass etc. It is submitted that these lands are improved at the risk of lives of so many. The inhabitants had to face wild animals, epidemic diseases before these lands are made into the present condition. Under the present social system, it is only normal to ignore such people and to report that these lands are waste without any improvements. There are 4 Government L.P. Schools, 3 Christian Churches, 3 Temples, 2 Mosques and cultural Institutions, which will be effected by this water logging. Moreover there are innumerable building involving lakhs of rupees possible of perishing.

(3) The poor people who have come up to the present position by hard work risking even their lives are now to quit their own lands without any abode elsewhere. This consequence of the construction of Dam should not be ignored when compensation to them are decided.

(4) It is apprehended that this project cannot be given up since there may be inter state agreements which cannot be violated. Therefore we are bring to your notice the following facilities to be impertively made to the poor lands holders at the place.

.....2/.

GOVERNMENT OF MYSORE

55

No. PWD 23 MKR 69.

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore,... 10 June, 70 *197*

FROM

The *Secretary to the Government of Mysore*
Public Works & Elecy., Department.

To

The Chief Engineer,
Irrigation Projects (South)
Bangalore.

Sir,

Sub: Joint Surveys of Submergible area in Kerala State under Kabini Project.

I am directed to invite a reference to the Government letter Memo No.PWD 23 MKR 69, dated 28-3-70 on the above subject and to request you kindly to submit the report to Government - urgently.

Yours faithfully,

ISSUED
Dated 10/6/70

(S.K. Mohan)
Under Secretary to Government,
Public Works & Elecy., Dept.,

S*/9/6/70.

2 Copies

54

No.PWD 23 NKR 69

Mysore Government Secretariat,
Vidhana Soudha,
Bangalore, Dated 6-6-1920.

From

The Secretary to the Govt. of Mysore,
Public Works & Elec.Department.

To

The Chief Engineer, (IP),
Bangalore.

Sir,

Sub: As at Page 53 C/F.

I am directed to invite a reference to the Government letter Memo No. PWD 23 NKR 69 dated 28-3-20 (p.53) the subsequent reminders of even number dated and your letter No. dated on the above subject and to request you kindly to submit the report to Govt urgently ~~to expedite your reply as the matter is urgent/long pending~~..

Yours faithfully,

6/6.
ghps:14966.

Under Secretary to Government,
Public Works & Elec.Deptt.

GOVERNMENT OF MYSORE 53

No.PWD 23 MKR 69. MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore, 25 March 1970.

FROM

The *Secretary to the Government of Mysore.*
Public Works and Electy.Deptt. ,
Bangalore.

To.

The Chief Engineer,
Irrigation (South),
Bangalore.

Sir,

Subject: Joint Surveys of Submergible area in Kerala State under Kabini Project.

Reference: Your letter No.KRP/54/F.II/69-70/TAC/2475 dated 3-3-70.

-.-

With reference to the communication cited above, I am directed to request you kindly to complete the Joint Surveys in all respects by 4/70 as programmed, and submit the report to Government.

Yoursfaithfully,

Sd/-(S.K. Mohan),
Under Secy. to Govt., P.W.&.Electy.Deptt.,

Authorised for Issue,

Section Officer,
Public Works& Electy.Deptt.,

evl.23.3.70/2.

PWD. 23 MKR. 69

To

The. CE1 (South) Bangalore

Sir,

Subject:— Joint Surveys of Submergible area in Kerala. State under Kabini project

Reference your letter No. KRP/54/P.I/I/69-20/TMC/2425— dated. 3. 370.

With reference to the ~~Communication~~ cited above I am directed to request you kindly to complete the joint Surveys ~~by~~ in all respects by 4/70. as programmed; and Submit the report to Govt.

Yours faithfully

21/8/70

21/8/70.

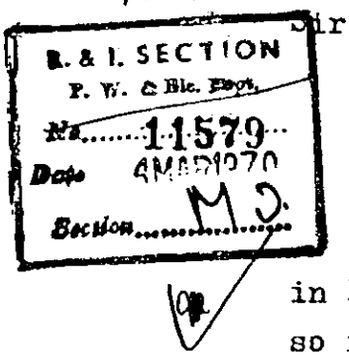
No. 63.

No.KRP/54/P.II/69-70/TAC /2475 Date 7.3.70

To

The Secretary to the Government,
Public Works Department,
Bangalore

1282



Sir,

Sub: Joint Surveys of submergible area in Kerala State under Kabini Project

---

The Joint Surveys of ~~submersion~~ submersion area in Kerala state is in progress and the progress ~~report~~ so far secured is narrated below for information of Government.

The Joint surveys were commenced on 6-12-68 and are in progress. So far, cross section on either banks of the river at an interval of 4 furlongs with additional cross section including base line have been completed within the Kerala state limits. ~~Few~~ balance surveys along the Bavali stream and Kannagal Hole, tributaries to Kabini river are in progress. The entire balance work on cross-section survey etc. within Kerala State is reported to have been programmed to be completed by jointly by April 1970.

The work of drawing out of contours jointly including transferring of the final contour on the ground is expected to be completed by February 1971. Recently, the Superintending Engineer, Kabini Project Circle had arranged for the joint inspection of the survey work with the Superintending Engineer concerned, and his staff on 20-1-70 and 21-1-70 and have discussed and chalked a programme for the completion of the balance survey work. A copy of the minutes of their discussion is also enclosed for kind reference.

Yours faithfully,

for Chief Engineer,
Irrigation (South)

Ns.28.2.

MINUTES OF THE JOINT DISCUSSIONS BETWEEN SRI S.P. BHAT., B.E.) M.I.E., SUPERINTENDING ENGINEER, KABINI PROJECT CIRCLE, MYSORE-2 AND SRI P. ARAVINDAKSHAN ACHAN, SUPERINTENDING ENGINEER, INVESTIGATION, RESEARCH AND PLANNING, PEECHI, KERALA STATE HELD AT MANATODY AND CANNANORE ON 20TH AND 21ST JANUARY 1970 IN CONNECTION WITH THE JOINT SURVEYS OF SUBMERSIBLE AREA IN KERALA STATE.

The following officers were present:-

1. Sri S.P.Bhat, Superintending Engineer, Kabini Project Circle, Mysore.
2. Sri P.Aravindakshan, Achan, Superintending Engineer, Investigation Research and Planning Peechi, Kerala State.
3. Sri K.K.N. Nampiar, Executive Engineer, Investigation Division (Irrigation) Cannanore.
4) Sri R.Vasudeva Reddy, Executive Engineer, Kabini Dam Division, No.2, Kabini Colony.
5. Sri C.George, Assistant Engineer, Joint Investigation Sub-Division, Manantody.
6. Sri S. Nagappa, Assistant Engineer, No.4, Joint Survey Sub Division, Kabini Colony.

I. The Progress achieved so far on the submersion surveys were reviewed by both the Superintending Engineers.

The Joint Survey Sub-Division commenced its works on 6th December 1968. So far, Cross Sections on either banks of the River at an interval of 4 furlongs with addtional cross sections including base line have been completed within the Kerala State Limits. Few balance surveys along the Bavali Stream and Kannagal Hole, Tributaries to Kabini River, are in progress. Following are the further observations:-

1. Cross section along the course of the River with river soundings are to be taken up immediately at suitable intervals in between the two cross sections already taken and the cross sectio s are to be extended upto R.L. 2340 to 2350.

This work along with the corss sectior work should be programmed to be completed before the end of April 1970. With the balance work on hand including drawing up of the contours and transferring the final contour on to the ground, it is anticipated that the present staff will have to be continued upto the end of ~~June~~ Februray 1971.

2. Cross Sections have been taken to a minimum R.L. of 2340 and is considered to be sufficient.

3. The cross sections have been taken at an interval of four furlongs as per the suggestion of the Chief Engineer, Irrigation, Trivandrum, Kerala State. As the final contours are to be transferred to the ground with actual survey details, the interval for the cross section now taken along with the cross section proposed to be taken while taking river soundings will suffice drawing of the reelvant contours.

4. The Cross Sections to be taken across the River and its tributaries can be stopped wherever the river bank level is 2340 and above beyond which the bank levels do not fall lower than this level. It was explained that with the calculations now avaialble, the anticipated back water level would be at about R.L.2319 for a maximum discha ge of 1,94,000 cusecs at the dam site. However, this is subject to confirmatio' by both the Chief Engineers after calculating the level by the standard step method based on River Cross Section particulars to be collected by the Mysore officials.

5. Detailed intereplolated contours should be drawn up jointly on Revenue Survey map for the entire area of submersion coming within Kerala State and these maps should be kept ready before September 1970.

6. It was agreed that the possible level of submersion due to back water effect may be arrived at by the officials of the Government of Mysore based on sufficient cross sections taken across the river and calculated by the standard step method, and these levels are to be informed to the officials of Kerala Government. It was further discussed and decided that the actual transfer of the required contour on to the ground, with the help of Revenue Surveyors, within the Kerala State Limits should be programmed to be started soon after the rains and completed before March 1971.

7. The G.T.S. Bench Mark has now been carried from the Ecliplse Hill near Manatody for the purpose of Joint Surveys.

Joint Survyes. A Temporary Bench Mark has been left on the parapet of the Bavali Bridge. The Chief Engineer, Irrigation, Trivandrum has suggested that the levels from the Bavali may be connected to the Dam site by the Kerala Officials.

8. Six Permanent Bench marks, two on the Right Bank two on the Left Bank and two on the Bavali and Kannegal Hole may be left by the Survey Party on Bench Mark Stones fixed in concrete blocks for facilitating taking up final fixing up of the boundary stones in the Kerala Area. This should be completed before April 1970.

9. It was discussed and decided that once the boundary stones are fixed for the purpose of acquisition the extent of land to be acquired and assessment of values of properties and structures, type of rehabilitation etc., will have to be taken up by the Revenue Department of both the States.

10. The original field and level Books maintained jointly by the Survey Party were perused by the Superintending Engineers. The procedure now adopted may be further continued.

11. In order to expedite the contour survey works, before April 1970, the Superintending Engineer, Kerala State agreed to strengthen the present party with one more batch. Similarly, the Superintending Engineer, Kabini Project Circle Mysore agreed on his part to match the addtional survey party.

12. The Superintending Engineer, Kerala State Explained that he would request the concerned forest officers to spare the services of the Forest guards and gun men for necessary protection to the Survey party.

Sd./-
(P.Aravindakshan Achan)
Superintending Engineer, Investigation, Rexsearch and Planning.
P ECHI, Kerala State.
Camp: Cannanore
Dated 21-1-70

Sd/-
(S.P.Bhat.
Superintending Engineer,
Kabini Project Circle, Mysore

Camp: Cannanore.
Dated 21-1-70.

(Copy.).

Technical Assistant to the
Chief Engineer, Irrigation

CSN/2370.

GOVERNMENT OF MYSORE

No. PWD 4746/MI/69. MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore, 16-1- *1970.*

FROM

Secretary to the Government of
Public Works & Elecy.Deptt., Bangaloro.

To.

The Chief Engineer,
Irrigation (South),
BANGALORE.

Sir,

Sub:- Kabini Project.

I am directed to forward herewith an extract of letter No.F. No.11/17/69-TE dated 5-1-1970 received from the Govt. of India, Central Water and Power Commission (Later Wing) New Delhi and request you to furnish the plan as desired by the Govt. of India immediately.

Yours faithfully,

(T.K. Mohan),
Under Secretary to Govt.,
Public Works & Elecy.Deptt.

Copy to File No.PWD 23 MKR 69.

GoI letter No 11/17/69-TE. WB
dated 5-1-70

2. Copies of Plan received under letter cited at (iv) does not clearly indicate the irrigation envisaged under Krishnarajasagar, Kabni Dam, Nugu Dam, Halsur anicut and Hulla halli anicut. The purpose of different colours viz., Yellow and green marked in the plan is not clear.

3. Plan with reference to the different colours and showing the areas of command under each canal from the various structures as mentioned in para 2 above may please be sent at an early date.

~~xxxxxxxxxxxxxxxx~~

GOVERNMENT OF MYSORE

No. PWD 23 MKR 69 (Supl) MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore, 5 Dec. 1969

FROM

The *Secretary to the Government of Mysore,*
Public Works & Elecy. Department,
BANGALORE.

To.

The Chairman,
C.W.& P.C. (Water Wing),
Government of India,
NEW DELHI.

Sir,

Sub: Forwarding of notes and Salient Features of Kabini Project - Supply of Index map.

Ref: Your letter No.11/17/69-TE dated 29-8-69.

....

With reference to the communication cited above, I am directed to furnish herewith two copies of Index Map of Kabini Reservoir Project showing the existing and the proposed commanded area, from the Kabini Dam and the Krishnarajasagar as desired.

Yours faithfully,

5.12.69

(S.K. Mohan)
Under Secretary to Government,
Public Works & Elecy. Department.

hvj/- 4/12

PWD 23 MLR 69 (Suppl)

To.

The Chairman
C.W & P.C. (Water Wing)
Govt of India,
New Delhi.

Sir

Subject:— Forwarding of notes and Salient features of Kabini Project — Supply of Index Map

Reference: Your letter No 11/17/69-TE dated 29-8-69.

With reference to the Communication cited above, I am directed to forward herewith Two Copies of Index Map of Kabini Reservoir Project showing the existing and the proposed. Commanded area, from the Kabini Dam and the Krishnarajasagar as desired.

Yours faithfully,

for Secretary

22/11/69

GOVERNMENT OF MYSORE

43

No. PWD 23 MKR 69

MYSORE GOVERNMENT SECRETARIAT.
VIDHANA SOUDHA,

Dated, Bangalore, 13 Nov. *196* 9.

FROM

The *Secretary to the Government of Mysore.*
Public Works & Elecy. Department,
BANGALORE.

To.

The Chief Engineer,
Irrigation Project (South),
Bangalore.

Sir,

Sub: Forwarding of Index Map.

I am directed to invite a reference to the Govern-ment letter No. PWD 23 MKR 69 dated 26-9-69 on the above subject and to request you kindly to expedite your reply as the matter is urgent.

Yours faithfully,

12/11

Section Officer,
Public Works & Elecy. Department.

ISSUED
Dated 13/11/69

hvj/- 11/11

Office of the
Chief Engineer, Irrigation S...
No. 63, Palace Road, Ban...

Date 18-11-69

No.KRS/Misc/ 1862 /TA3

To

The Secretary to the Government,
Public Works Department,
Bangalore

Sir,

4980

R. & I. SECTION
P. W. & Elc. Dept.
No. 44113
Date 21 NOV 1969
Sec. -

Sub: Forwarding of index map

Ref: Govt.letter No.PWD 23 KKR 69 dt.28-9-69

The index map of Kabini Reservoir project is forwarded herewith in triplicate, as desired.

Encl: 3 sheets.

Yours faithfully,

for Chief Engineer, PWD
Irrigation (South)

Ns.17.xi

No. 11/17/69-TE

GOVERNMENT OF INDIA
CENTRAL WATER AND POWER COMMISSION
(WATER WING)

New Delhi, the 29 August, 1969.

3943

R.& I. SECTION
P. W. & El. Dept.
No. 31575
Date 1 SEP 1969
Section MG

To

The Secretary to the Govt. of Mysore,
Public Works & Elecy. Deptt.,
Vidhana Soudha,
BANGALORE.

Subject:- Forwarding of notes and salient features of Kabini Project - Supply of index map.

Sir,

Reference your letter No. PWD 23 MKR 69 dated 21.8.69 under which two copies of the notes and salient features of the Kabini Project have been forwarded to this office. It is requested that two copies of index map of Kabini Reservoir Project showing the ~~irrigated areas~~ existing and the proposed commanded areas from the Kabini Dam and the Krishnarajasagar ~~Dam~~ may please be ~~furnished immediately~~. Supplied.

Yours faithfully,

29/8/69

(N.K. Agrawal)
Director-TE
for Chairman, C.W.&P. Commission.

GOVERNMENT OF MYSORE

No. PWD 23 MKR 69. (Sec 1)

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore, 24.9. *196* 9.

FROM

Secretary to the Government of Mysore,
Public Works & Elecy.Deptt., Bangalore.

To.

The Chief Engineer,
Irrigation (South),
BANGALORE.

Sir,

Sub:- Forwarding of Index Map.

I am directed to request you kindly to furnish three copies of Index Map of Kabini Reservoir Project showing the existing and the proposed commanded areas from the Kabini Dam and Krishnarajasagara immediately.

Yours faithfully,

Sd. S.K . Mohan
Under Secretary to Govt. PWD.

Issued dated 24/9/69

Authorised for issue:

24/9/69

Section Officer,
Public Works & Elecy.Deptt.

No.PWD 23 MKR 69 GOVERNMENT OF MYSORE

Mysore Government Secretariat,
Vidhana Soudha,
Bangalore, Dt. Feb. 1969

From

The Secretary to the Govt. of Mysore,
Public Works & Elecy.Department, Bangalore.

To

The Chief Engineer, IP, South/~~North~~, (~~General~~), ~~Investigation~~,
Bangalore/Dharwar

Sir,

Sub:-As at page ..... Forwarding of Index Map C.F.

I am directed to invite a reference to the Government letter /Memo No. PWD 23 MKR 69 dated 26-9-69 ~~the subsequent reminders of even No. dated~~ ~~and your letter No.~~ dated on the above subject and to request you kindly to expedite your reply as the matter is urgent/~~long pending~~.

~~This is pending since~~ ~~for want of your reply.~~

Yours faithfully,

Section Officer,
Public Works Department (G.I.).

PWD 23 MKR 69 (Stpl).

38

To

The CE (S) Bangalore

Sir

Sub: — Forwarding of ~~water and~~ index Map.

I am directed to request you, kindly to forward ~~three~~ two copies of index map of Kabani Reservoir project showing the existing and the proposed Command areas from the Kabani Dam and Keerthinarayanapura immediately

Yr F

Yrs

MR 23/9

Copy issued

MR 23/9

EXPRESS TELEGRAM STATE

SECRETARY
PWD VIDHANA SOUDHA
BANGALORE

REULET PWD.20-MKR.67 EIGHTH FEBRUARY 68 (.) PLEASE SEND TWO COPIES OF BOOKLET CONTAINING NOTES AND SALIENT FEATURES OF KABBINI PROJECT AS REVISED

DIRECTOR TE
CWPC

Not to be telegraphed:

(N.K. Agrawal)
Director, TE.
Central Water & Power Commission, WW
Bikaner House, New Delhi-11
Dated the 11th August, '69.

3662
R. & I. SECTION
P. W. & Elec. Dept.
No. 2880½
Date 19 AUG 1969
Section

No. 11(17)/65-TE
Government of India,
Central Water & Power Commission,
(Water Wing)

New Delhi, the 11th August, 1969.

Post copy in confirmation to: Secretary to the Govt. of Mysore, Public Works Department, Vidhana Soudha, BANGALORE.

Two Copies of the Notes and Salient Features has already been sent. No action is required on this Communication. May be recorded as Dy. May be placed in the Council file

(N.K. Agrawal)
Director, TE. WW
Central Water & Power Commission,
Bikaner House, New Delhi-11
dt. 11.8.69

GOVERNMENT OF MYSORE

45 36

No. PWD 23 MKR 69. MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore, 18-12-69 23

FROM

Secretary to the Government of Mysore
Public Works & Elecy.Deptt., Bangalore.

To. The Chief Engineer,
Irrigation (South),
BANGALORE.

Sir,

Sub: Irrigation - Kabini Reservoir Project - Mysore.

Ref: Your letter No.KRP/54/TAD/69-70/32-64 dated 24-11-1969.

With reference to the communication cited above I am directed to forward herewith a copy of the letter No.PWD 21 MKR 61 dated 22-8-1962 along with the two reference cited in the latter, as desired.

Yours faithfully,

Sd.S.K.Mohan
Under Secy.to Govt.PWD.

Authorised for issue:

18/12/69
Section Officer, PWD.

ISSUED
Dated 23/12/69

PWD 23. NKR 69

~~44~~ 35

To

The. CE (S) Bangalore.

Sir,

Subject:— Irrigation - Kabini Reservoir Project - Mysore.

Reference your letter NO KRP/541/TAD/69-70/32-64/dated 24-11-69.

With reference to the communication cited above I am directed to forward herewith a copy 'X' of letter PWD 21 NKR 61 dated 22-12-69 along with the Two references kept below has to be typed. cited in the letter, as desired

'X' Flag 'A' B C in file no

PWD 21 NKR 61

Regn issd 30

4/12

4/s

GOVERNMENT OF MYSORE

No. KRP/54/TAD/69-70/3264/

Office of the Chief Engineer,
Irrigation(South),
63, Palace Road, Bangalore-1,
Dated: 24-11-69.

To

The Secretary to Government,
Public Works & Electricity Department,
Vidhana Soudha, Bangalore-1.

Sir,

Sub: Irrigation - Kabini Reservoir Project - Mysore.

I request you kindly to forward a copy of letter No.PWD 21/MKR 61 Dated: 22.8.1962 together with the two references stated therein (Dated: 11.2.1962 and 9.5.1962) addressed to the Secretary, PWD., Kerala State by the Secretary, PWD., Mysore, early, as the same is urgently required in this office for reference.

Yours faithfully,

for Chief Engineer, PWD.,
Irrigation (South)

R. & I. SECTION
P. W. & Elec. Dept.
No. 44793
Date 25 NOV 1969
Section MG

42

33

The main file on the Subject: PWD.
23 MLR 69 has been submitted to
Secy PWD. on 3.9-69. the return of the
file may be awaited.

27/10/69

GOVERNMENT OF MYSORE

PWD 23 MKR 69.

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore, 12 Decr. *1969*.

FROM

The *Secretary to the Government of Mysore*
Public Works and Electy.Deptt.,
Bangalore.

To

The Chief Engineer,
Irrigation (South),
Bangalore.

Sir,

Sub:- Irrigation Projects in Cauvery basin.

While enclosing herein a copy of letter No.18421/P1/69/W&P dt.28-11-69 from the Government of Kerala, I am directed to state that you may discuss with the Chief Engineer, Kerala, matters relating to Kabini Project, without commiting Government in any manner. The Kerala States interest in Cauvery basin is only in the Kabini sub-basin.

Yours faithfully,

(S.K. Mohan),
Under Secretary to Government,
Public Works and Electricity Department.

avl.9/12/69/2.

GOVERNMENT OF KERALA
WATER & POWER (GENERAL & PLANNING) DEPARTMENT.

No. 18421/P1/69/W&P. Trivandrum, Dt: 28-11-1969.

From
The Secretary to Government.

To:
The Additional Secretary to the Government
of Mysore, Irrigation,
Govt. Secretariat, Vidhana Soudna,
Bangalore.

Sir,

Sub:- Irrigation projects in Cauvery baisn - regarding.

I am directed to inform you that Shri K.I. Idiculla, the State Chief Engineer for Irrigation will be visiting Mysore very shortly to hold discussions with the Chief Engineer, Irrigation Projects, Mysore on matters of common interest relating to the Irrigation Projects in the Cauvery basin. I am to request that the Chief Engineer, Irrigation Projects, Mysore may be permitted to discuss these matters with Chief Engineer, Kerala during the latter's visit to Mysore.

Yours faithfully,
Sd/-
(P?T. MATHEW)
Assistant Secretary,
for Secretary to Government.

'COPY&'

avl.9/12/69/2.

PWD 23 TKR 69

CE (Smm)

Bydone

Subj: Irrigation projects in Cannanore division

Sir,

While enclosing herein a copy of letter No 18421/P1/69/PWD dt/28-11-69 from the Govt of Kerala, I am directed to state that you may discuss with the Chief Engineer Kerala matters relating to Kalyani Project without committing Govt in any manner. The Kerala Govt is not interested in Cannanore division. The interest is only in the Kalyani project.

Yours.

by

29

GOVERNMENT OF KERALA

WATER & POWER (GENERAL & PLANNING) DEPARTMENT.

No.18421/P1/69/W&P. Trivandrum, dated: 25-11--1969.

From

The Secretary to Government.

To

The Additional Secretary to the Government
of Mysore,
Irrigation,
Government Secretariat,
Vidhana Soudha,
Bangalore.

Sir,

Sub: Irrigation projects in Cauvery basin - regarding.

....

Secy. PWD. No 1929 Date 1/12.

I am directed to inform you that Shri K.I. Idiculla, the State Chief Engineer for Irrigation will be visiting Mysore very shortly to hold discussions with the Chief Engineer, Irrigation Projects, Mysore on matters of common interest relating to the Irrigation Projects in the Cauvery basin. I am to request that the Chief Engineer, Irrigation Projects, Mysore may be permitted to discuss these matters with Chief Engineer, Kerala during the latter's visit to Mysore.

Yours faithfully,

P T Mathew

(P.T.Mathew)
Assistant Secretary,
for Secretary to Government.

tgn.28.

28

GOVERNMENT OF KERALA

No. 25578/P1/66/W&P

WATER & POWER DEPARTMENT
(General & Planning)
Trivandrum, dated 16.8.1969

From

The Secretary to Government

To

The Secretary to the Govt. of Mysore,
Public Works and Electricity Department,
Mysore Government Secretariat,
Vidhana Soudha,
BANGALORE

Sir,

Sub:- Kabini Project of Mysore - regarding.

Ref:- This Government's letter of even number dated 24.8.1968 and the reminders thereto.

P193
PWD 217 ICA 61

I am directed to invite your attention to this Government's letter cited and to request that the reply of the Government of Mysore in the matter may kindly be expedited.

3695

R. & I. SECTION
P. W. & Elec. Dept.
No. 2921
Date 20 AUG 1969
Section MG

Yours faithfully,

(P.T. Mathew)
Assistant Secretary
For Secretary to Government

LJ/16.8

GOVERNMENT OF MYSORE

No. PWD 23 MKR 69. MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore, 26-8- 1969.

FROM

Secretary to the Government of Mysore,
Public Works & Elecy.Deptt., Bangalore.

To.

The Director,
The Central Water and Power Wing,
(Water Wing)
NEW DELHI.

Sir,

Sub: Forwarding of notes and salient features of Kabini Project.

Ref: Your Telegram dated 11-8-1969.

I am directed to forward herewith two copies of notes and salient features of Kabini Project as desired.

Yours faithfully,

(S.K. Mohan),
Under Secretary to Govt.,
Public Works & Elecy.Deptt

Issued
Dated 31/8/69

two o/c
Please See Pages 14-22 for notes and Salient features

PWD 23. MKR 69

26

To

The Director,
The Central Water & Power Wing
(Water Wing) New Delhi.

Sir,

Sub:- Forwarding of Notes and Salient Features of Kabini Project.

Ref your Telegram dated 11-8-69 I am directed to forward herewith Two Copies of Notes* and Salient Features as of Kabini Project as desired.

Yours faithfully,

Sd/-
U/S

*'Flag A' has to be typed

MDS
14/8

By hand

TO OPEN CUT HERE

INDIAN POSTS AND TELEGRAPHS DEPART

OFFICE TELEGRAM

RESIDENCY CLERK

Dep.....

Address

SECY PWD VIDHANA SOUDEA BANGAL

12.40 AM

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FIRST FOLD

C. No.....

Stamp 69-8-11

SECRETARY TO GOVERNMENT T/255 13 AUG 1969 PUBLIC WORKS DEPT. DS(F)

Time of { Booking / Receipt

From

By

The sequence of entries at the beginning of this telegram is—class of telegram, time handed in, serial number, office of origin, date, service instructions (if any) and number of words.

This form must accompany any enquiry respecting this telegram.

X 2040DA 1450 NEW DEL41 11 STE 34

REULET PWD.20- MKR.67 EIGHTH FEBY 68 (.) PLEASE SEND TWO COPIES OF BOOKLET CONTAINING NOTES AND SALIENT FEATURES OF KABBINI PROJECT AS REVISED= DIRECTOR TE CWPC=

MGIPAb.

Speed U.S(T) 13/8

PVE (Inf) Irri.(n) No 3/8/PWD 13-8-69. 13/8

13/8

13/8

GOVERNMENT OF MYSORE

PWD 23 MKR 69
Encl. Note, etc.)

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA

Dated, Bangalore, 12th August, 1969.

FROM

The Secretary to the Government of Mysore
Public Works & Electricity Dept.

The Special Commissioner,
Mysore House,
Chanakyapuri, Kautilya Marg,
NEW DELHI.

Sir,

Sub:- Note on Kabini Project.

Ref:- Post copy of Telegram No.533

With reference to the above, I am directed to forward herewith a Note on Kabini Project, as desired.

Yours faithfully,

(S.K. Mohan).
Under Secretary to Government,
P.W.D. (Technical).

Dated. 12/8/69

cn/

23

GOVERNMENT OF MYSORE

PWD 23 MKR 69

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore, August, *1969*

FROM

The
Secretary to the Government of Mysore
Public Works & Elecy. Department,
BANGALORE.

To

The Special Commissioner,
Mysore House,
Chanakyanapuri,
NEW DELHI.

Sir,

Sub: Note on Kabani Project.

Ref: Post copy of Telegram No. 593.

With reference to the above I am directed to forward herewith a copy of Note, ~~and the a copy of Yakta and Salient Features etc.~~, on Kabani Project, as desired.

Yours faithfully,

(S.K. Mohan)
Under Secretary to Government,
Public Works & Elecy. Department.

hvj/- 11/8

A NOTE ON THE KABINI RESERVOIR PROJECT

The Kabini Reservoir Project was sanctioned in February 1959 for Rs.320 lakhs. It envisaged the construction of a storage Reservoir across Kabini River at Biderahalli - Beechanahalli in Heggadadevanakote Taluk of Mysore District. The project was proposed to provide irrigation benefit to 30,000 acres out of which 6.000 acres were to be under the two channels taking off from the Reservoir and the balance 24,000 acres under the existing Krishnarajasagar Reservoir.

Accordingly the works were taken up for execution during December, 1959, after calling for tenders.

During excavation of the foundations, it was noticed that hard rock required for the foundations of the masonry section was not met with at the anticipated depth of 20' below the river bed level. The foundations for the masonry dam had to be taken much deeper resulting in extra quantity and extra cost.

With a view to provide for larger irrigation under the project the storage capacity of the reservoir was increased. The increased storage resulted in increased cost of the scheme.

The increase in prices of cost of materials and labour further contributed to the upward-wise in the cost of the project. Advantage was also taken to provide for generation of power at the dam site from the normal releases into the river.

The rivised project in short is as under:-

1. <u>THE DAM SITE</u>; The dam across the river Kabini is located between the Bidarahally village on the right bank and Beechanahally Village on the Left Bank, in Heggadadevanakote Taluk, Mysore District (latitude 11 - 58.5' (North) and Longtitude 75 - 21.2' (East). The river Kabini in the Cauvery basin, joins the river cauvery at Tirumakudlu Narasipur after flowing

contd....

for a distance of 132 miles from its origin.

The dam site is approachable from Mysore City along the Mysore - Manantody Road. The catchment area at the dam site is 827 Sq.miles. The over all length of the dam is 8965' and the area of water - spread 23.7 Sq.miles. The live storage of the Reservoir is 19.182 M.Cft. with two cCanals taking off at R.L:2249.00 on either bank. River sluices are provided at R.L. 2219.00 The full Reservoir level is at R.L. 2284.00. Twenty villages with hamlets and lands get submerged. The submerssion area is mostly covered by the forest lands and to a very small extent by cultivable lands.

2. Benefits:- The project provides for

(i) Irrigation facilities to an extent of 1,26,000 acres in Mysore and Mandya - Districts (59,000 acres wet crop, 47,000 acres semi-dry and 20,000 acres II Crop)

(ii) Development of power to an extent of 16,000 K.Ws. at Dam site.

3. Canal System:- Under the Kabini Reservoir two Canals one on each bank Viz.,

(a) Kabini Right Bank Canal
(b) Kabini Left Bank Canal

are proposed

(c) Another Canal, Viz., Right Bank H.L.C. from K.R.Sagar has been proposed.

3. (A). Kabini Right Bank Canal:- The Right Bank Canal takes off from Kabini Reservoir and runs for a total length of 96 miles, Irrigating an area of 77,000 acres in H.D. Kote, Nanjangud, T.Narasipur, Yelanduru and Kollegal Taluks of Mysore District. The Canal after crossing the Suvarnavathy River at its 96th mile tails into Irasvady Tank.

3.(B) Kabini Left Bank Canal:- The left Bank Canal takes off from the Kabini Reservoir and runs for a length of 20 miles upto taraka river which is a tributary to Kabini River and irrigates an area of 5,000 acres of paddy

crop.
cxxxx

contd....

3. (C): Right Bank High Level Canal from K.R.Sagari:- Water meant for power generation at Sivasamudram and Shimsha downstream of Krishnarajasagar is at present being supplied from Krishnarajasagar and Kabini River during the summer months from January to May. With the construction of the Kabini Reservoir the releases for power generation from Krishnarajasagar will be stopped and the water for power generation at Shimsha and Shivanasamudram will be released from Kabini Reservoir. The supply of nearly 8,000 M.Cft. of water thus made available at Krishnarajasagara is proposed to be utilised for irrigation purposes on the Right Bank of the Cauvery river, by taking off the Right Bank High Level Canal from the existing sluices of Krishnarajasagar at + 60 level. The Right Bank High Level Canal runs for 35 miles, and tails into Varuna tank. The Canal Irrigates an area of 24,000 acres.

3.(D): Second crop Irrigation:- It is proposed to raise a second crop under the existing old anecut channels below Kabini Dam (Viz., Hullahalli Channel, Ramapur Channel and Madhavamantri Channel; and also under the Kabini Reservoir Channels. The total area proposed under the Second Crop is 20,000 acres.

4. Power Generation:- Power is proposed to be developed to an extent of 16,000 K.W. through a single penstock of 16 diameter embedded in the non-overflow masonry section adjoining the spillway section on the Right side, utilising the releases from the dam into the river. The power house is proposed to be located at about the river bed level.

Salient features of the Kabini Project as revised are enclosed in the accompanying sheets.

hvj/-

SALIENT FEATURES AND TECHNICAL DETAILS.
KABINI DAM.

k.

1. General.

1) Name of the Dam.	Kabini Dam.
2) Name of River	Kabini River
3) Location of the Dam	Between Bidarahally and Beechanahally in Heggadadevanakote Taluk, 4 miles above Saragur, in Mysore District.
4) Purpose	Irrigation, power generation and water supply to Bangalore.
5) Means of access	6 miles from 1/120th mile of Mysore Manantody Interstate High way.

2. Geo-physical features.

1) Catchment area	827 square miles.
2) Nature of catchment.	Hilly covered by thick forest.
3) Climate	Moderate.
4) Temperature conditions.	72 F.(Mean)
5) Mean annual precipitation.	70"(Varying from 30" to 125")
6) Average yield condition at Dam site.	Average:104 T.M.Cft. Maximum: 190 T.M.Cft Minimum: 69.7 T.M.Cft
7) Silt charge per year.	0.3 M.Cft
8) Rate of flow	Maximum: 1,18,000 cusecs (1924) Minimum: 200 cusecs.
9) Geological feature of Dam site.	Randum Strata including granite and trap rock.

3. Technical details.

A) Reservoir.

i) Gross storage capacity	19.52 T.M.Cft.
ii) Live Storage	19.19 T.M.Cft.
iii) Dead Storage	0.33 T.M.Cft.
iv) Lowest foundation level.	R.L. 2110.00
v) River bed level (av.)	R.L. 2204.00
vi) Dead storage level.	R.L. 2219.00
vii) Full Reservoir Level.	R.L. 2284.00
ix) Maximum flood level	R.L. 2284.00
x) Top of Dam: i) Masonry.	R.L. 2294.00
ii) Earth Dam	R.L. 2299.00

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xi) Top of parapet	R.L. 2298.00
xii) Maximum area of water spread	23.4. Square Miles.

B. Storage Dam.

i) Type of Dam.	Masonry gravity Dam with overflow and non overflow sections with earthen flanks on either side.
ii) Length of left non overflow Dam	290'
iii) Length of overflow spillway Section.	235'
iv) Length of Power Dam.	70'
v) Length of Right non overflow Dam.	290'
vi) Length of earthen bund.	
i) Left Bank.	5780'
ii) Right Bank.	2300'
vii) Total Length of Dam.	8965ft.
viii) Height of the dam above the average river bed level.	90'
ix) Maximum base width at foundation level.	~~x33x191~~
a) Overflow section.	135.19'
b) Non overflow section	143.5'
x) Top width of Roadway.	24 ft.
xii) Dam section slopes.	
a) Overflow section.	1:1 slope unto R.L.
Upstream side.	2219.00 and 1:10 unto foundation level.
Downstream side:	Beyond curve 0.714 to 1

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b) Non over flow sanction: Upstream side.	Vertical upto R.L.2235.00 and 1 in 10 upto foundation level.
Downstream side	Vertical upto R.L.2264.00 and 0.7 to 1 upto foundation level.
xii) Type of Masonry.	
A) Overflow. a) Hearting.	Uncoarsed rubble masonry in Cement mortar 1.4 proportion from foundation level to R.L. 2154.00 and from R.L.2194.00 to crest level and rubble masonry in surki mortar 1.4 between R.L. 2194.00 and 2154.00
b) Upstream face.	Coarsed rubble masonry in Cement mortar 1.3 for 10' width from R.L.2214.00 to crest level with size stone fact work.
c) Downstream face.	R.C.C.crest cap as per approved profile and cut stone work in Cement mortar 1.3 proportion below.
B) Non over-flow a) Harting.	Uncoarsed rubble masonry in Surki Mortar 1:4 proportion upto R.L. 2154.00 Uncoarsed rubble masonry in cement mortar 1:4 proportion below R.L.2154.00 upto foundation level.
b) Upstream c) Downstream	Size stone masonry in surki mortar 1:4 proportion from R.L. 2194.00 to top.
xiii) Foundation treatment	Conselidation grouting 30' deep holes at 20' C/C. Curtain grouting 50'-100' deep holes at 20' C/C.
xiv) Drainage gallery	Size 5'x7½'
xv) Length of spillway Dam	235'
xvi) Designed flood intensity	1,94,150 cusecs.
xvii) Discharging length of spillway.	160'
xviii) Maximum flood lift	40'
xix) Maximum discharging capacity	1,94,150. cusecs.
xx) Energy dissipation.	Hydraulic jump type stilling basin.

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xxi) Bridge over the spillway.

a) Type of Bridge.	R.C.C.slab decking supported on T.Beams.
b) Clear span between piers.	40 feet.
c) No. of spans	4
d) Width of pier.	25'
e) No.of piers.	3
Spillway crest.	Ogee section.
Crest Gates.	Radial Type, 4 Nos 10'x 40'
River sluices	3 Nos.of 10'x 15'

xxx) Irrigation sluices

a) Right bank sluice	5 nos of 8'x10'
b) Left bank sluice	2 Nos of 4'x10'

4) Important design assumptions and results.

1) Weight of Masonry.	140 Lbs/Cft.
2) Uplift pressure	100 % at heel, 50% at gallery and zero at toe.
3) Allowance co-efficient of friction at joints and base.	0.7.

5) Details of submergence.

i) Total submergence	15,434 Acres.
ii) Total cultivable area of submergence	8,904 acres
iii) Villages submerged	20 Nos. with hamlets.
iv) Houses affected.	2,692 families.
v) Population affected.	11,250
vi) Roadway.	Existing Mysore M[redacted]ody Road for a lgngt[redacted] miles between An[redacted]m the and Bavali.

6) Details of Kabini Hydel Project:

i) Average bed level.	R.L.2204.00
ii) Full Reservoir level.	R.L.2284.00
iii) Minimum drawdown level	R.L.2249.00
iv) Maximum flood level. (in the River)	R.L.2237.00
v) Maximum gross head available for power generation (river bed unit with 3,000 cusecs discharge.)	75 feet.
vi) Minimum grosshead.	40 feet.
vii) Maximum discharge	3,000 Cusecs.
viii) Minimum Discharge.	1,000 Cusecs.
ix) Unit Capacity.	1[redacted],000 KW.
x) Energy generator	74 million KWH[redacted]
xi) Cost at H.T.Bus	Rs.237 Lakhs.
xii) Cost per KWH energy generated.	3.25 paise p[redacted]

7. Canals

1. Sobini Right Bank Canals

Length of main canal	30 miles.
Capacity at head	1422 cusecs.
Full supply depth	11.5 feet.
Bed slope in contour cutting.	0.5 feet per mile.
in Deep cutting	2.0 feet per mile.
Bed width	42 feet.
Side slopes in cutting	1:1
For Bank- Inner	1½:1
- Outer	2:1
Value of 'N'	0.025

Masonry works:

(a) Cross drainage works.	
Aqueducts.	18 Nos.
Under tunnels.	103 Nos.
Superpassages.	51 Nos.
Pipe culverts.	133 Nos.
(b) Regulation works.	
Regulators.	3 Nos.
Standing wave flume.	6 Nos.
(c) Communication works.	
Road Bridges.	19 Nos.
Cart bridges.	60 Nos
Foot bridges.	25 Nos.
Railway bridges.	1 No.

2. Sobini Left Bank Canal.

Length of main canal.	50 miles.
Capacity at Head.	157 cusecs.
Full supply depth.	5 feet.
Bed slope in cutting and in banks	1 ft. to 1.5 ft per mile
in deep cutting	3 ft per mile.
Bed width.	11 feet.

Side slopes incutting	1.1
For Bank - Inner	1½:1
- Outer.	2:1
Value of 'N'	0:025

Masonry works:-

a) Crossdrainage works:

Aqueducts.	1 No.
Under tunnels	2 Nos.
Super passage.	19 Nos.

b) Regulution works.

Cross regulators.	2 Nos.
Standing wave flumn.	2 Nos.

c) Communication works.

Road bridges.	4 Nos.
Cart Bridges.	13 Nos.

3. Right Bank High level Canal from Krishnarajasagara

Length of Main canal.	36 Miles.
Capacity at head	660 cusecs.
Full supply depth	9.5 feet.

Bed slopes in cutting and banking 0.75 feet to 1.25 ft/mile

in deep cutting -	4 feet per mile.
Bed width.	24 feet.
Side slopes in cutting	1:1
For Bank - Innder	1½:1
Outer	2:1
Value of 'N'	0.025

Masonry Works.

a) Cross drainage works.

Aqueducts.	(9 Nos)
Under tunnels.	25 nos.
Huperpas ages.	13 Nos.

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b) Regulation works:	4 Nos.
1) Cross Regulators	3 Nos.
2) StandingWave finume	3 Nos.
1)Road bridges	7 Nos.
2) Cart Bridges	32 Nos.
3) Railway Bridge	1 No.

Irrigation Details.

1. Cross command area.

a) Under Kabini Right Bank Canal	1,00,000 acres.
b. Under Kabini Left Bank Canal	6,500 acres.
c. Under Right Bank High Level Canal from K.R.Sagar.	30,000 acres.
	1,36,500 Acres.

2. Ayacut in Acres.

a. Under Kabini Right Bank Canal	77,000 acres
b. Under Kabini Left Bank Canal	5,000 acres.
c. Right Bank High Level Canal	24,000 Acres.
d. Second crop - Under Kabini Reservoir Canals.	7,000 Acres.
- Under old Anicut chls. viz., Hullahally and Rampur channels.	13,000 acres.
Total	1,26,000 acres.

c. Cost.

1. Kabini Dam and submergence	11.80 crores.
2. Kabini Right Bank Canal	10.00 Crores.
3.Kabini Left Bank Canal	0.70 crores.
4.Right Bank High Level Canal from K.R.S.	2.30 crores.
Total	24.80 crores.

Abstract.

1. Ayacut	1,26,000 acres.
2. Utilisation	28.4 T.M.Cft.
3. Cost	24.8 crores.
4. Cost per acre	Rs.1,994/-
5. Percentage Returns.	0.80%
6. Total Annual food production	44,000 Tonnes.

Sd. Superintending Engineer
Kabini Project Circle
Mysore.

PWD 23 MKR 69 Bgr Air mail

To

The Special Commissioner
Mysore House
Chanakyapuri New Delhi

Sir,

Sub:- Note on Kabani project

Ref:- Post Copy of Telegram No. 593.

With reference to the above I am directed to forward herewith ~~a Copy~~ 2 copies of Note X and ~~the a Copy of~~ ~~Salient features etc of the~~ on Kabani project, as desired.

X Flag A! Should be typed as Encl.

Yours faithfully,

U/S

PS

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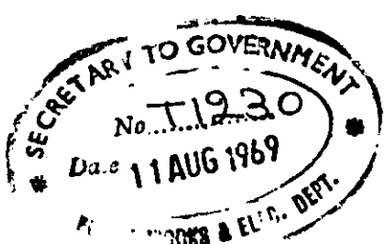

CHIFSEC BG 239
SPLCOM ND-593
NEW DELHI · MESSAGE FROM SHRI SANTHI
FOR THE SECRETARY PWD BANGALORE
'' A NOTE ON KABINI PROJECT REQUIRED IMMEDIATELY
STOP PLEASE AL+ AIRMAIL TODAY STOP''

TLP 11/8/69

Today 11/8/69

GOVERNMENT OF MYSORE

No. PWD 23 MKR 69.

Mysore Government Secretariat,
Vidhana Soudha,
Bangalore, dated.....July..1969.

FROM

The Secretary to the Government of Mysore.
Public Works & Elecy. Department, Bangalore.

To

The Under Secretary to Government of India,
Ministry of Irrigation and Power,
NEW DELHI

SIR,

SUBJECT:-Kabani Project of the Government of Mysore, Regarding.

REFERENCE:-Your letter No.DV II(9)66 Dated 6-6-69.

With reference to the communication cited above, I am directed to state that the Kabani Project has been taken up under the 1924 Agreement as an off-set reservoir against the Bhavani Sagar in Madras and in as much as the Government of Madras had not made any proposals at the time of 1924 Agreement with regard to the utilisation of Kabani Waters in that state, the concurrence of the Government of Kerala who are the successors, to the Government of Madras as far as the Kabani is concerned, is is not considered necessary.

Yours faithfully,

(S.K.MOHAN),
UNDER SECRETARY TO GOVERNMENT,
PUBLIC WORKS & ELECY. DEPARTMENT.

Copy with copy of letter of Government of India, cited above forwarded for information to:-
1. The Chief Engineer, Irrigation Projects (South), Bangalore.
2. The Chief Engineer, Investigation, Bangalore.

Under Secretary to Government,
Public Works & Elecy Department.

BRG 9-7-69.

Copy of letter No.DW.II-11(9)/66, dated 6th June 1969, from the Government of India, Ministry of Irrigation and Power, New Delhi, addressed to the Secretary to the Government of Mysore, Public Works & Elecy. Department, Bangalore.

Subject:-Kabini project of the Government of Mysore--Regarding.

I am directed to forward herewith a copy of D.O.letter No.25578/P1/66/W&P dated the 7th May 1969, from Sri.K.P.Viswanathan Nair, Secretary, Water and Power Department, Government of Kerala, and to request that the comments of the State Government thereon may kindly be furnished to this Ministry at an early date.

Yours faithfully,
Sd/-
(R.L.MOHAN),
Under Secretary to the Government of India.

"COPY"

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Bhavani and Kabini which will be detrimental to the interests of Kerala.

In view of the facts stated above, this Government consid[illegible] that 1924Agreement should be revised as early as possible and until this is donem no schemes can be allowed to be taken up by Madras and Mysore States in terms of the 1924 agreement without the concurrence of the Kerala Government. I am therefore to request you kindly to take up this matter with the Madras and Mysore Governments. In the meantime, the Government of Mysore may not be allowed to proceed with the work on their Kabini Project without the concurrence of this Government and the Government of India. The Government of Mysore may also be requested to furnish this Government with a copy of the Project Report on their Kabini Project at an early date.

I shall be obliged for a line in reply on the action taken at your end.

With regards,

Yours sincerely,
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Copy of Letter No.25578/P1/66/W&P dated 7th May 1969, from the Secretary to Government, Water & Power Department, Government of Kerala, Trivandrum, addressed to the Joint Secretary to the Government of India, Ministry of Irrigation and Power, New Delhi.

Subject:-Kabini Project of the Government of Mysore--reg.

Reference:-Correspondence resting with that Ministry's letter No.DW.II-11(9)/66 dated 31-10-1968.

Kindly refer to the correspondence cited on the above subject, We are not aware of the developments, if any, taken place in the matter.

As you may be aware, this question is under correspondence between this Government and the Government of India from July 1966, the first letter addressed to that Ministry being on 18-7-1966. This Government have not been so far furnished with a copy of the Project report of the Kabini Project of Mysore. In the meantime, we understand that the Government of Mysore are going ahead with their work on their project. The Government of Madras have also intimated that they have not given their concurrence to the Government of Mysore for taking up their Kabini Project.

Kerala is not a party in 1924 agreement. But Kerala, as a successor State is bound bythe Madras-Mysore agreement. Conditions have changed after 1956 in view of the States Re-organisation. Before 1956, the interests of Malabar which wasthen part of the erstwhile Madras State, were not safeguarded. If the Mysore and Madras States are allowed to take up their schemes on Kabini and Bhavani, without the concurrence of Kerala, the interests of Kerala on these rivers willbe highly affected.

The Madras Mysore agreement 1924 is open for reconsideration in 1974. This Government feel that if Kerala have to wait

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PWD 23 MKR. 69

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Ministry of Irrigation & Power
New Delhi

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Y. T.

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U/S

8/10/6/69

Copy sent copy of letter from GOI

Cited some journals for inclusion to

1) CE. IP (Sutra / Bypass

2) CT (Investigation) Bypass

Serial No 1 / Reply ~~Sl. No. 84~~

P 2

No. DW.II- 11(9)/66
Government of India
Ministry of Irrigation & Power
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New Delhi, the ~~3rd~~ 6th June, 1969.

To

1. The Secretary to the Govt. of Mysore,
Public Works & Electricity Department,
Bangalore.

2588

R & I. SECTION
P. W. & Elec. Dept.
No. 16552
Date 9 JUN
Section MG

2. The Secretary to the Govt. of Tamil Nadu,
Public Works Department,
Madras.

Subject:- Kabini project of the Government of Mysore - Regarding.

Sir,

I am directed to forward herewith a copy of D.O. letter No. 25578/P1/66/W&P dated the 7th May, 1969, from Shri K.P. Viswanathan Nair, Secretary, Water and Power Department, Government of Kerala, and to request that the comments of the State Government thereon may kindly be furnished to this Ministry at an early date.

Yours faithfully,

(R.L. MOHAN)
UNDER SECRETARY TO THE GOVERNMENT OF INDIA

Sl. No. 84. A.

P 1

K.P.Viswanathan Nair,
SECRETARY TO GOVERNMENT
WATER & POWER DEPARTMENT
GOVERNMENT OF KERALA
TRIVANDRUM
7th May, 1969.

No. 25578/P1/66/W&P.

My dear Iyer,

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The Madras Mysore agreement 1924 is open for re-consideration only in 1974. This Government feel that if Kerala have to wait till 1974, Madras and Mysore will go ahead with their schemes on Bhavani and Kabini which will be detrimental to the interests of Kerala.

In view of the facts stated above, this Government consider that 1924 Agreement should be revised as early as possible and until this is done, no schemes can be allowed to be taken up by Madras and Mysore States in terms of the 1924 agreement without the concurrence of the Kerala Government. I am therefore to request you kindly to take up this matter with the Madras and Mysore Govts. In the meantime, the Government of Mysore may not be allowed to proceed with the work on their Kabini Project without the concurrence of this Government and the Government of India. The Government of Mysore may also be requested to furnish this Government with a copy of the Project Report on their Kabini Project at an early date.

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Shri K.G.R. Iyer,
Jt. Secy. to the Govt. of India,
Ministry of Irrigation & Power, New Delhi.